Just Tell Me When You Don't Understand

An exploration of the role of educational psychologists in the assessment of children's language

Post-qualification

Doctorate in Educational Psychology

2015

F.M.C. Nield

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Declaration

This work has not been submitted in substance for any other degree or award at this or any other University or place of learning, nor is being submitted concurrently in candidature for any degree or other award.

Signed:  (Candidate) Date: 1st May 2015

This thesis is being submitted in partial fulfilment of the requirements for the degree of DEdPsy.

Signed:  (Candidate) Date: 1st May 2015

This thesis is the result of my own independent work and investigation, except where otherwise stated. Other sources are acknowledged by explicit references. The views expressed are my own.

Signed:  (Candidate) Date: 1st May 2015

I hereby give consent for my thesis, if accepted, to be available online in the University's Open access repository and for inter-library loan, and for the title and summary made available to outside organisations

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Acknowledgements

The author of this study would like to thank the educational psychology colleagues who cooperated, assisted and collaborated in this exploration of one aspect of educational psychology practice. They gave their time and thoughts freely and theirs was the fundamental contribution to the insight gained from the study. The study took place at a time when there were many uncertainties, both for individual educational psychologists and for the future of the employing Educational Psychology Service. Colleagues participated in the study against a backdrop of Local Authority budget reform, the introduction of a Commissioning model, the move to Traded Services, and its consequent shift to a commercial approach of negotiation between the educational psychologist and schools or other services, and a major office move.

The children with whom the educational psychologists worked provided a gratifyingly wide range of responses: these were essential to the exploration and potential development of the assessment activity under investigation. Thanks should also go to children in the author's family, who were presented with various forms of the task in advance of the study, and to the many family members who provided support and encouragement.

Without the assistance of the employing Local Authority's financial contribution from a Continuing Professional Development fund, this study would not have been possible and, finally, huge thanks are due to Dr Simon Claridge and the Cardiff staff team, and most especially to Dr Jean Parry, professional tutor at Cardiff University, who has provided the ideal balance of support, feedback and encouragement.

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Abstract

Children with language difficulties generally have their needs recognised at an early age through the established systems for monitoring pre-school developmental milestones. This study is based, however, upon the argument that a child will be referred to an educational psychologist because someone has concerns about some aspect of development or progress, possibly relating to a range of overt issues or behaviours and, as language difficulties lie along a dimension from mild to severe, less-evident language difficulties could be a constituent feature in a more complex presentation. Therefore early consideration of a wide range of potentially contributory factors is central to the psychological approach to the initial formulation of a child's learning profile.

Review of the literature illustrates the importance of early detection of language needs to minimise both short-term and longer-term difficulties, and educational psychologists are arguably well-placed to contribute to this; however, they may not feel confident in the assessment of children's language, for a range of possible reasons which are discussed in this study.

Although there is some research into confidence in professional practice, particularly in the field of medicine, there appears to be no specific study into confidence of the educational psychologist in practice. A tentative view based upon the researcher's professional experience, and supported by the tangentially related research, suggests that there may be some issues of confidence for some EPs in this area of professional practice. It is suggested that educational psychologists could develop confidence in response to a simple two-part intervention: provision of basic information in the area of language difficulties, and the use of a specific informal assessment task designed both as a rapport-building activity, and acting as a screen or triage to indicate whether more detailed assessment or referral to a specialist speech and language therapist might be indicated.

The study employs a mixed methods design, based in a critical realism approach to research, and which generates both quantitative and qualitative data. Phase I of the study explored the EPs' confidence, to determine whether there was a basis of informal evidence for

the premise of the study. An initial baseline of EPs' confidence was elicited through a survey questionnaire to the whole Educational Psychology Service. EPs from the service who volunteered to be part of the Phase II of the study then self-rated their confidence in this area at the outset of the study, in an individual interview with the researcher. This group of EPs also received training on language difficulties and on the application of a specific assessment activity. Phase III involved three academic terms for the EPs to apply the assessment method in their general casework. Phase IV was a further self-rating of each EP's confidence at the end of the study as part of a further interview with the researcher, and Phase V was a group discussion with the participants, sharing views of the study and its strengths and weaknesses.

The numerical data are presented in graphical form, and Thematic Analysis has been applied to interview data to identify the key themes from the study.

At the conclusion of the study, all but two educational psychologists reported an increase in their confidence in this area (one dropped by one point, one remained at the same high level of confidence), and reported that the study had made a positive change to their practice in this area.

Results are presented in full and a range of issues discussed; the study provides some initial and tentative conclusions leading to suggestions for the professional practice of educational psychologists.

Clarification of terminology and use of abbreviations

To enhance the readability of the study the following shorthand terms are used throughout:

Child (plural children) is the term used in place of the more unwieldy, though probably more accurate, Child or Young Person, whose accepted short version is C/YP. It is the researcher's opinion that the C/YP abbreviation looks inelegant and lacks respect. No specific gender is indicated nor implied by the use of the term child.

Language, as a term, is used in the current study primarily to refer to the spoken language, since the main focus of the current study is a child's expressive language, although, if receptive difficulties are evident these would also be noted; the use of the term Language in this study does not include speech production or errors of pronunciation.

Language difficulties / issues with language development – these general phrases incorporate concerns about any of the components of Language which may be taking a delayed or a different developmental route from the typical.

EP is used as the standard abbreviation for educational psychologist, hence **EPs** for the plural and **EPS** for Educational Psychology Service.

Concerns about a child - It is acknowledged that the stated concerns of a school or family may well reflect a number of perspectives on different elements of the child's context. However, for the purposes of this study, these will be subsumed in the general statement of "concerns about a child", whilst simultaneously recognising that a referral to the educational psychologist may frequently be made for a range of complex and inter-related factors.

A specific assessment approach or **a specific assessment task** and **the Frog Story assessment** are used as phrases for the assessment approach which is applied in the study. This assessment approach is one which is a very natural and typical activity for an EP to carry out with a child whom they have just met: namely, sharing a book together.

Current study refers to the present research study.

Abbreviations commonly used in the area:

SEN:	Special Educational Needs
SLCN:	Speech, Language and Communication Needs
SLI:	Specific Language Impairment
SLT:	Speech and language therapist
SSLD:	Specific Speech and Language Difficulties (rarely used)
SEBD:	Social Emotional and Behavioural Difficulties

CHAPTER 1 ~ INTRODUCTION

The aims of the current study are:

- To explore EPs' perceptions of, confidence in, and approach to exploring children's language development and its assessment, and to consider whether their confidence reflects the length of their professional experience
- To determine whether EPs' confidence in assessing language would change following a training session in language difficulties and the use of a specific assessment activity, and to consider whether their confidence or any change in their confidence reflects the length of their professional experience
- To determine whether a training session in language difficulties and the use of a specific assessment activity is useful to the EPs in their practice, and whether these have changed how the EPs will subsequently assess language

1.1 BACKGROUND AND AIM OF THE CURRENT STUDY

The topic under exploration relates to educational psychologists' confidence in the early identification of possible difficulties in children's language development, and the purpose of the current study is to explore and (potentially) enhance colleague EPs' confidence in this area.

The researcher has been fortunate to have had extensive professional experience of working with children and young people with disordered language in a range of generic and specialist settings. Eight years as the educational psychologist on the staff of a residential special school for children with language difficulties provided opportunities to meet and work with not only a wide range of children with complex language difficulties from across the country, but also a range of Local Authority EPs from across the country, as they visited the school regarding placement requests or for children's Annual Reviews. The author's role of coordinating the school's multidisciplinary assessment approach required daily collaboration with a number of other professional disciplines, primarily speech and language therapists and occupational therapist, but also highly specialist teaching staff and child psychiatrists. The children who attended for assessment did not always have immediately-evident presenting needs, with the impact of their complex difficulties becoming more evident throughout the extended period of multidisciplinary assessment. Hearing the difficulties the children and families had encountered during the process of gradually arriving at an understanding of the nature of their profile of needs has been a major impetus in conducting this study.

As a result of meeting the visiting Local Authority educational psychologists, then reflecting upon their experiences and those of the children and families, and considering how such complex language needs might be identified at an earlier stage, the author of the current study argues that EPs may often be in a privileged role of seeing children at a (relatively) early stage, where the pattern of their needs is not yet fully understood. This sets the profession in the valuable position of having the opportunity to recognise whether language difficulties may, at the very least, be a contributory factor in the presenting issue.

A final feature underpinning the current study is the author's personal view which has developed over many years through collaboration with EPs in Borough and County Educational Psychology Services, as well as through the specialist role explained above. This view is that EPs may, quite appropriately, see language, and its development, as the professional province of speech and language therapists, and therefore concentrate their thinking in other areas. Making a generalisation to illustrate the point, the author of the current study noted occasions where experienced and highly competent EPs seemed to convey, either directly or indirectly, a degree of reluctance to explore this area in their assessments, beyond comments about the function of a child's language within the context or setting. However, early recognition by an EP that there is a possibility of difficulties in the area of language development could then be discussed with a colleague speech and language therapist at an early stage.

The combination of these experiences supported the researcher's view that there appears to be a clear need for early identification of the possibility of a child having difficulties with language development. Although there are robust mechanisms in place to identify children with overt language needs, an additional factor in this study is the likelihood that there are children in schools whose needs are not so evident, but are nevertheless impacting upon their progress (Law, McBean & Rush, 2011). Early identification could then occur at a level and stage prior to referral to speech and language therapy: such identification may also assist in determining whether the language issues might be a contributory feature in a more-evident presenting issue for the child, or school, (e.g. Thorpe, Rutter, and Greenwood 2003), or whether the language issues are a core factor in the concerns that are being raised.

An assumption brought by the researcher to the current study is that someone referring a child to an EP will have concerns about the child, even though the concerns may be non-specific, or the referral question possibly framed in terms of the most evidently "visible" issue, without being able readily to identify the underlying elements of the child's presenting difficulties**.** The idea for the current study arose from this combination of observations and experiences.

Alongside these observations and experiences came a view that trialling a specific assessment approach would give a child the opportunity to generate language in 'real time' as opposed to the more static methods e.g. selecting a picture. Professional experience in the specialist role underlay this ambition, where the author had considerable experience of the use of a video narration task devised by the assessment team with children with language difficulties in the specialist residential setting. This was judged by the school's specialist assessment team to be an extremely fruitful assessment tool, but the time cost made general application unwieldy and impractical: when it became clear that this was not a realistic method for data gathering on a wider scale, the use of more simple narration tasks was explored both in the specialist setting and for application in the current study.

More recently, the Year of Communication, which was implemented by the Communication Trust (2011), provided a contemporary context for this study. The personal professional experience of the author of the current study as a member of the Local Authority's team working within the Government's Pathfinder Speech, Language and Communication Needs (SLCN) initiative, brought an additional focus and direction to the study. The Pathfinder project's target-setting process required outcome measures which could be quantified over nine months maximum. When looking at whole-school interventions to identify and support SLCN, this seemed at the least ambitious and, in practical terms, unrealistic. Discussion with the Local Authority's statistician revealed that targets were being driven by a Health Commissioning model, which provided more directly countable data: for example, number of beds empty or number of deaths in four weeks. However, the long-term outcomes for identification and support for young people with SLCN did not fit this model.

The initial step in the current study was to conduct a survey of all members of a County-wide Educational Psychology Service (EPS), exploring the levels of confidence of the EPs in their practice in the area of language development and its assessment, in order to determine whether further investigation would be indicated. This survey revealed a wide range of understanding of language development and assessment practice, and gave some weight to the informal observation that EPs were not all fully confident in this area, thereby providing further support for conducting the current study.

The underpinning precept behind the selection of the more narrative-based task used in the current study is that many, though not all, formal published language assessments have activities which sample individual components of spoken language; these often allocate time for the child to formulate a response. The author does not intend to imply any criticism of these

assessments, but the current study is attempting to apply an assessment approach which is less formal or standardised, but which does require the child to generate real language in real time, and in response to a (relatively) natural and typical stimulus i.e. a book.

The Literature Review presents a summary of theoretical perspectives and empirical studies relating to the elements contributing to the current study: the psychological process of change, professionalism and confidence in professional practice, and language development. Further studies provide data on the prevalence of language difficulties, and illustrate the argument for the importance of early detection of language difficulties, including data on the outcomes for children whose language difficulties are retrospectively considered to have been undetected, or which have been subject to later identification than would be desirable.

The research design is a mixed methods approach generating both quantitative and qualitative data. The quantitative data are presented graphically and in tabular form, and the qualitative data have been analysed by thematic analysis, illustrated by samples, where possible, of each stage of the process: the resultant themes are presented in a visual map format for discussion in the results chapter.

The aim of the current study is to explore EPs' confidence in their practice in the area of children's language development, and whether this can be identifiably enhanced both by the provision of basic training on language development and difficulties, as well as by the application of the specific narrative-based assessment approach. It is also hoped that the features drawn out from the data derived in the current study may contribute to a wider exploration of EPs' practice in this area, and be the basis of an approach for those EPs who might wish to develop this area of educational psychology practice.

1.2 SUMMARY OF CHAPTERS

The remaining thesis will follow the structure set out below.

1.2.1 Chapter 2 ~ Literature review

This chapter provides:

- The current research on professional practice and the role of confidence in practice
- An overview of the theories of language development
- Models of language development
- Theories on delayed and disordered language development
- Data on the prevalence rates of language difficulties, their impact in other categories of learning need and the long term outcomes

- The argument for the importance of early detection
- The role of the professionals in the identification of language difficulties
- The role of the EP
- The theoretical backdrop to the choice of assessment activity for the current study

1.2.2 Chapter 3 ~ Research design

In this chapter the literature relating to psychological research is reviewed and the relevant elements applied to the current study to ensure that it is ethically sound and professionally principled, and provides a rationale for the selection of a mixed methods model chosen for the current study

1.2.3 Chapter 4 ~ Results and findings

Numerical data are presented in graphical and/or tabular format as appropriate, while the resulting themes from the thematic analysis process are presented in narrative form, with an overview of the three main themes presented in a diagrammatic visual map.

1.2.4 Chapter 5 ~ Discussion

The Discussion chapter explores the various patterns evident in the data, as well as aspects which have little pattern or trend. Possible explanations for the data trends, or absence thereof, are considered. Unanswered questions are considered, along with issues arising, while further discussion explores the features of the study which were considered to be especially successful, and those aspects which, with hindsight, would have been modified. Key findings are summarised.

1.2.5 Chapter 6 ~ Conclusion

This chapter summarises the themes from Chapter 5, and from these draws conclusions about their relevance and application to the wider professional practice of educational psychology. Suggestions are made for areas of possible further exploration. The study concludes with the researcher's personal reflections upon the process.

1.3 RESEARCH QUESTIONS

The study's systematic exploration of the role of the EP in the assessment of children's language is conducted through the framework of three research questions:

Table 1. Research questions

RQ 1a.	*What are EPs' perceptions of, confidence in, and approach to exploring children's language development and its assessment?*
RQ 1b.	*Does the EPs' confidence in this area reflect their length of service?*
Source	Data (A): : EPS whole-service questionnaire survey [N]=20 Data (B: pre-) Participant EPs' self-rating in initial interview [N]=9 Data (B: pre-) Participant EPs' responses in initial interview [N]=9

RQ 2a.	*Does EPs' confidence in assessing children's language change following a training session in language difficulties and the use of a specific assessment?*
RQ 2b.	*Does any **change** in the EPs' confidence in this area reflect their length of service?*
Source	Data (B: pre-) Participant EPs' self-rating in initial interview [N]=9 Data (B: pre-) Participant EPs' initial interview [N]=9 Data (B: post-)Participant EPs' self-rating in follow-up interview [N]=8* Data (B: post-)Participant EPs' follow-up interview [N]=8*
** One EP was on extended leave and not available for the follow-up interview*	

RQ 3a.	*Is a training session in language difficulties and using the specific assessment useful to the EPs in their practice?*
RQ 3b.	*Has the training session in language difficulties and using the assessment changed how the EPs will subsequently assess language?*
Source	Data (B: post-)Participant EPs' follow-up interview [N]=8* Data (C): Comments from the group discussion

1.4 PHASES OF THE STUDY

The study was conducted in five phases:

1.4.1 Phase I

The initial questionnaire to the whole EPS to determine the EPs' views on language and their confidence in its assessment [N]=20. The results from this initial phase provided the basis for further exploration of this area of EP practice.

1.4.2 Phase II

The initial (pre-) interview between the researcher and each of the participant EPs at the outset of the study, prior to the provision of the training session in language difficulties and the introduction to the assessment activity [N]=9.

1.4.3 Phase III

A group training session on language difficulties and the introduction of the specific assessment activity, including an exploration of the range of approaches to its use.

1.4.4 Phase IV

After three academic terms, the follow-up (post-)interview between the researcher and each of the participant EPs at the end of the study, discussing the impact of the training session in language difficulties and the application of the assessment activity [N]=8* and including individual debrief.

1.4.5 Phase V

The group discussion and further debrief sharing observations and outcomes with the participant EPs [N]=8*.

** One EP was on extended leave and not available for the follow-up interview or group discussion.*

1.4.6 Schematic overview of the study:

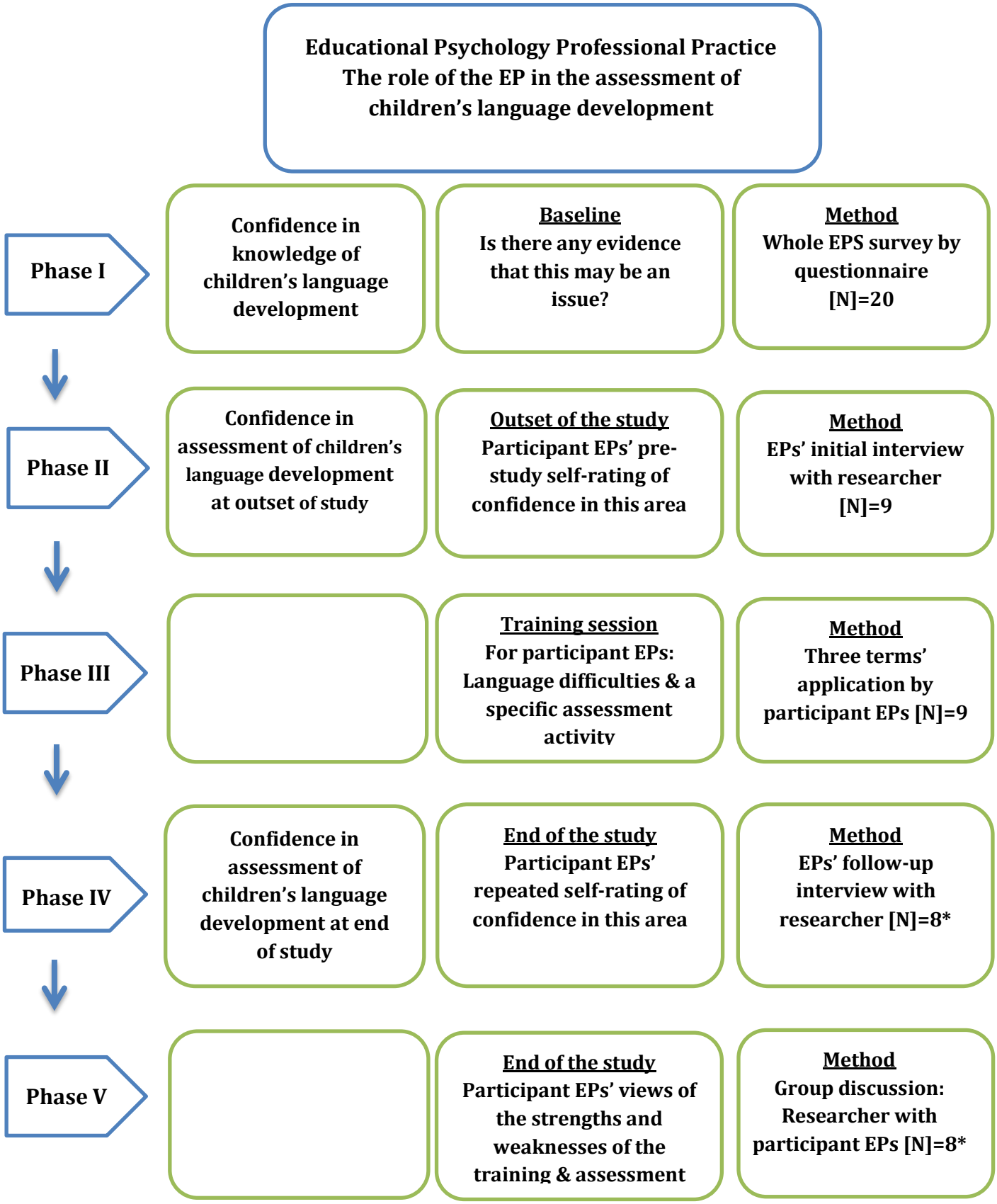


Figure 1. Schematic overview of the study

CHAPTER 2 ~ LITERATURE REVIEW

2.1 INTRODUCTION

The focus of the current study is one aspect of EP practice: their knowledge and confidence in the area of children's language development. The study seeks to explore this aim through an intervention to support a change in the EPs' practice – a change which is intended to enhance their confidence in this area.

2.1.1 Structure and visual map of literature review

The literature review sets the theoretical and research context for the study with the following progression:

Background to the selection of research areas for review

Psychological theories of change and the relationship of change to professional development

The relationship of theories of psychological change to the concept of professionalism, with a specific focus upon the element of confidence in practice

Language and its development, including different models to illustrate development, and the importance of language to cognitive development

Atypical language development – both delay and disorder

Prevalence rates of language difficulties, impact of language difficulties and the short- and long-term outcomes

Identification and assessment of language difficulties and the importance of early detection

2.1.2 Background to the selection of research areas for review

The literature review has been led by the topics outlined above, and the process of exploring the literature in the various selected areas has been guided by the views of Wolcott (2009). Wolcott advises the researcher to ensure that there is a clear and coherent argument which gradually narrows down the topic from the broad context of the study, progressively focusing through relevant components, features, debates, issues and topics, to direct the reader to the research questions under review. The following 'clear and coherent argument' provides the underpinning rationale for the selection of research to illustrate the progression of the current study.

Language development is a vital component for cognitive development: positive and enhanced cognitive development impacts on economic status into adulthood (i.e. greater level of education, more complex job), whilst a paucity of oral language results in negative consequences for the individual and can have a consequential impact upon society (Dodd & Crosbie, 2011; Nelson, 1998, 2009).

As with a range of features of human development, language difficulties lie on a continuum from mild through moderate to severe, and as such are a dimensional rather than a categorical difficulty: Schoder, 2011; Crisp, Howard & Ralph, 2011; Anthony, Williams, Duran et al., 2011; and Billard, Fluss and Pinton, 2009. Language difficulties may therefore either be the primary need for a child, or they may be a component in a more complex presenting picture. Language difficulties have been shown by the authors above to affect a wide range of areas in a child's development including: behaviour, social and emotional development, learning and, into the future, economic independence: published studies generally relate to children with significant and readily-identifiable language difficulties. As an illustration of the importance of focusing upon children's language development, there has been sufficient concern for various Governments to have put in place a range of initiatives over the years. Such Government-led initiatives are supported by relevant professional organisations e.g. the Royal College of Speech and Language Therapists, as well as by two high-profile language-based charities (ICAN and AFASIC), thereby providing further impetus to this area of children's development. Initiatives during recent years include: Birth to Three Matters (2002), Chatter Matters (2006), The National Strategies (2007), Every Child a Talker (2008), The Early Language Development Programme (2011), Every Child Understood (2011), Talk to Your Baby (n.d.), and the provision of Sure Start Children's Centres (n.d.). See also Section 2.7.3: Intervention in language development.

It could be argued that significant language difficulties are already largely catered for through identification in the national developmental checks for young children or through a range of Early Years professionals, and intervention can be provided in a timely fashion. However, less severe language difficulties are, by definition, not so readily evident, they may emerge at a later age, and they may not meet criteria either for referral to, or acceptance by, the Speech and Language Therapy services. These services may apply cut-off points for referrals: for extent of difficulty, for level of progress, and for age at referral. Therefore there will be other children with some level of need, either detected but not meeting criteria for referral, or present but undetected, and these difficulties may be impacting upon the children's progress in education, yet they are nevertheless not eligible to receive any level of intervention.

The current study argues for the importance of the early identification of language difficulties which may not be so severe or readily identifiable, but nevertheless have the same features as more evident or severe difficulties, and still have the capacity to impact upon the children and their opportunity to maximise their potential.

The argument for EP involvement in this process is supported by studies of the prevalence rates and the outcomes for children with Speech, Language and Communication needs (SLCN) providing an evidence base for the importance of early detection e.g. Bercow (2008), Strand & Lindsay (2009), Dodd & Crosbie (2011). Following on from these arguments it is important to know about EPs' current practice in this area: how confident do they feel about forming a view on a child's language development? What types of assessment do they use? How important do they think it is to explore language in the assessment process? How do they view the boundaries between professional roles? The author of the current study suggests that a professional working in this area requires knowledge and understanding of typical language development in order to recognise when language development is not following either a typical route or at a typical rate; having further knowledge and understanding of the areas within language which might be breaking down thereby ensures appropriate intervention at the earliest possible time.

As potential change in the EPs' behaviour is fundamental to the study, some psychological theories of change and of professional practice are reviewed**.** Finally, further studies that support the rationale for the choice of the assessment task applied in the study are reviewed.

2.1.3 Scope of the literature review

The literature review is largely, though not entirely, restricted to the research based in the United Kingdom, since this is the most relevant to the current study's exploration of children and EPs in this country. Generally the research originates from the 2000-2010 period, although a number of papers from the second half of the 20th Century, as well as those from other countries beyond the UK, are included where relevant, or if there is an absence of UK research in that topic. The papers and references provided have been selected as appearing to reflect the mainstream of the work in this area at the current time, and either within the UK or broadly similar contexts, for example, the United States. The literature on *Professionalism* has its roots within the United States of America, and work from the 1970s is provided as a foundation to the more recent work on the topic within the UK.

Examples of work which bridges the gap between theoretical explanations of language development and practical applications of these theories continue the link to the current study. The boundaries to the research presented in the Literature Review are intended to maintain clear relevance to the thread of argument in the study, to base arguments upon data derived from broadly similar educational contexts, and to remain clearly within the defined scope of the Thesis.

2.1.4 Sources

The majority of the key sources for the Literature Review have been via remote access to University Libraries and databases, including primarily ERIC (Education Resources Information Centre), PsychLit Database, PubMed, the British Psychological Society website's PsychSource, Taylor & Francis Online and PsychInfo Database from the American Psychological Association. A further source has been the individual researchers' own websites, where their published papers may be listed, sometimes with the facility to download them, and full references provided.

2.1.5 Key search terms

Table 2. Key search terms used in the literature review

Key search terms for *Confidence*	Key search terms for *Change*
• Confidence • Competence • Performance • Professionalism • Professional standards • Clinical practice	• Change • Organisational change • Improvement • Learning cycle / curve • Learning Theory

Key search terms for *Language*	Key search terms for *Assessment & Early Identification*
• Language • Language development • Psycholinguistics • Lexicon • Vocabulary • Word-finding /-retrieval • Syntax • Grammar • Pragmatics • Delayed language • Disordered language • Phonology • Criteria for access • Specialist services • Speech and Language Therapy	• Prevalence [of language difficulties] • Outcomes • Speech and Language Therapy • Outcomes • Impact

2.2 PSYCHOLOGICAL THEORIES OF CHANGE AND DEVELOPMENT

The current study is primarily about change in one aspect of EP practice: their knowledge and confidence in the area of children's language development. The study seeks to explore this aim through an intervention to support a change in their practice – a change which is intended to enhance their confidence in this area. The study therefore opens with a review of the literature on professional development, change, continuous improvement as it may relate to professional development over increasing years of practice and experience, and confidence as it relates to professional practice.

Theories of change and development provide the theoretical background to activities designed to contribute to professional development and enhance professional practice.

2.2.1 Theory of Change

The topic of change has been studied at a number of levels. As an early proponent of theory of organisational change and the factors involved in the process, Kurt Lewin (1951) proposed a three-step model of change: Unfreeze – Transition – Refreeze, and companies have applied this to increase their effectiveness, e.g. Continental Airlines.

However, models of change can also be applied to the social context, where the desired outcome is to modify and improve social structures and outcomes for groups of people (Fulbright-Anderson, Kubisch & Connell, 1998). A further area for change is at the individual level, promoting cognitive, emotional or behavioural change, for example through individual therapeutic approaches, (Nichols & Zax, 1977; Steiner, 2000) or behaviour change, for example with respect to health and well-being (Prochaska & Diclemente, 1983; Prochaska, Diclemente & Norcross, 1992).

2.2.2 The Learning Curve and Continuous Improvement

The Learning Curve was first posited by Wright (1930) in the American aircraft industry, where he suggested that it provided a basis to a model of productivity: that the greater experience a worker had, the less time it would take the worker to perform a task. Zangwill and Kantor (1998) further developed the idea in the notion of Continuous Improvement, asserting that the Learning Curve is a means of tracking improvement with respect to production processes: they provide examples from Japanese car manufacturing to illustrate its use as a management tool for monitoring performance. Zangwill and Kantor use a mathematically- and statistically-based model, and discuss the problems with identifying improvement, citing one

factor being that "the usual cost data are extremely noisy" (p.912); this presumably mirrors their view that the concept of Continuous Improvement is "abstract and imprecise" (p.910). In critiquing the original theory of the Learning Curve, Zangwill and Kantor note that the idea of the Learning Curve has been widely used "in nearly all industries" (p.912) and assert that, because it is so important, there have been attempts (apparently post hoc) "to place the learning curve on theoretical foundations" (p.912). The authors go on to quote Mishina (1987) who has made the suggestion that, since the causes of learning are not clear, this results in "a dumb curve" (p.912). As a result of this, Zangwill and Kantor have then developed the idea by applying psychological learning theory to assert that, in industry for example, Management applies strategies for improvement, and if these are shown to work then Management will continue to apply them; if they are not successful, then they will be ceased. The researchers imply the parallel with learning theory, and this leads them into discussing their argument that Continuous Improvement is driven by "underlying learning" (p.911) and could therefore be used as a basis for developing a theory which expands Learning Curve theory into a model of Learning Cycles, reflecting a view of learning being Continuous Improvement.

The development of these ideas has resulted in the model known as the Plan-Do-Check-Act cycle, proposed and developed by Deming (1986), and also known as the Deming Cycle, the Deming Wheel or the PDCA cycle and shown in one version, as applied by Cardiff University for the University's aim to "create a continuous improvement culture" (Plan-Do-Check-Act, 2015):

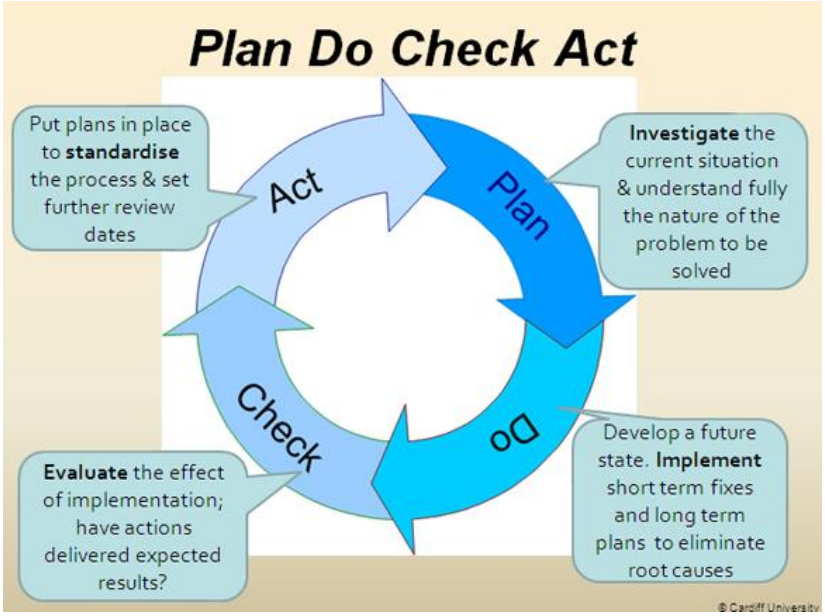


Figure 2. Plan-Do-Check-Act cycle

It should be mentioned briefly that the PDCA cycle is not the only model to arise from the theory of Continuous Improvement. An example of one other similar is the PDSA cycle: Plan-Do-Study-Act (Langley, Nolan & Nolan, 1994) and presented on a coaching website (Plan-Do-Study-Act, 2015):

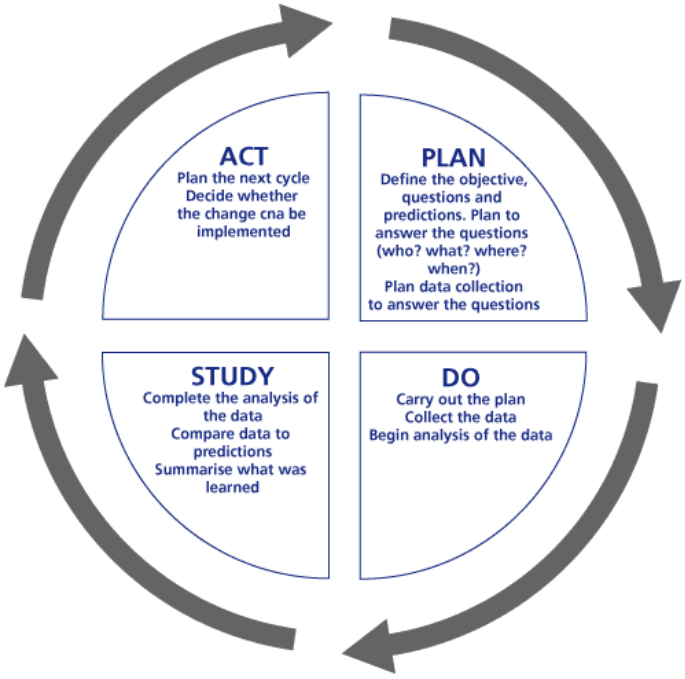


Figure 3. Plan-Do-Study-Act cycle

This coaching website also provides a visual conceptualisation of the PDSA model to reflect the *continuous* and iterative nature of the Continuous Improvement process:

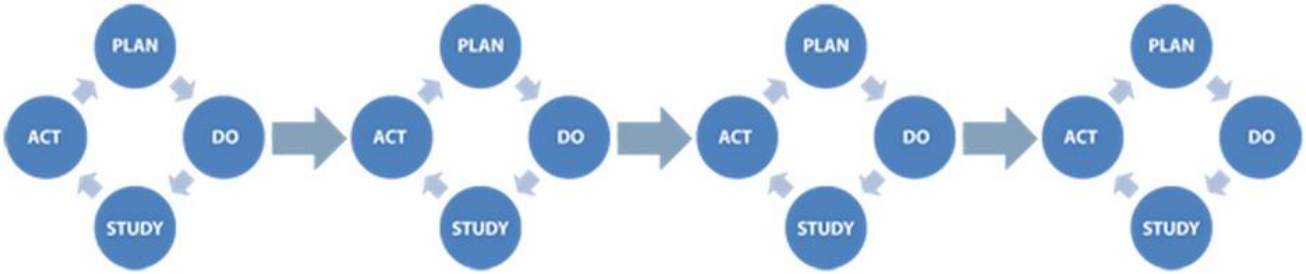


Figure 4. Plan-Do-Study-Act cycle - the iterative process

The PDSA model appears to be widely used in the NHS (NHS Scotland, 2015):

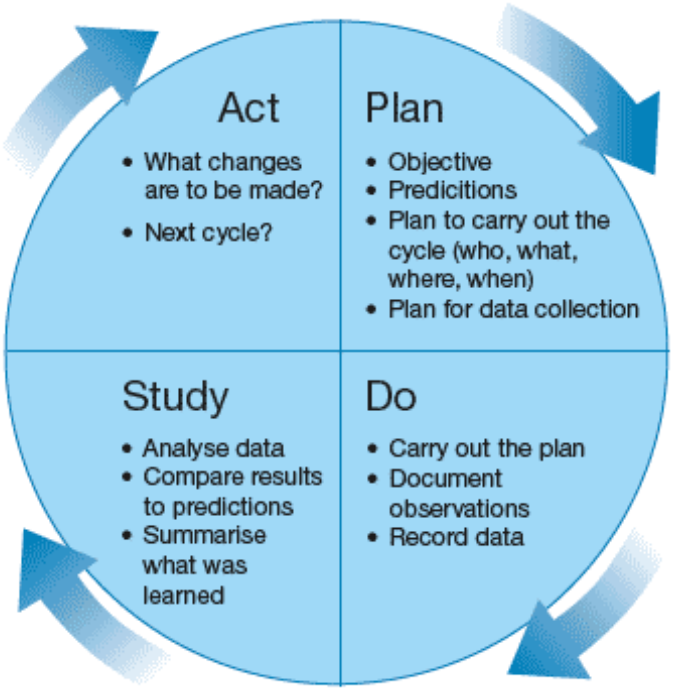


Figure 5. Plan-Do-Study-Act cycle (NHS)

However, it is also applied to educational contexts, with the following example reflecting both the iterative nature of the process and the Early Years focus for which it is the basis (Education Scotland, 2015):

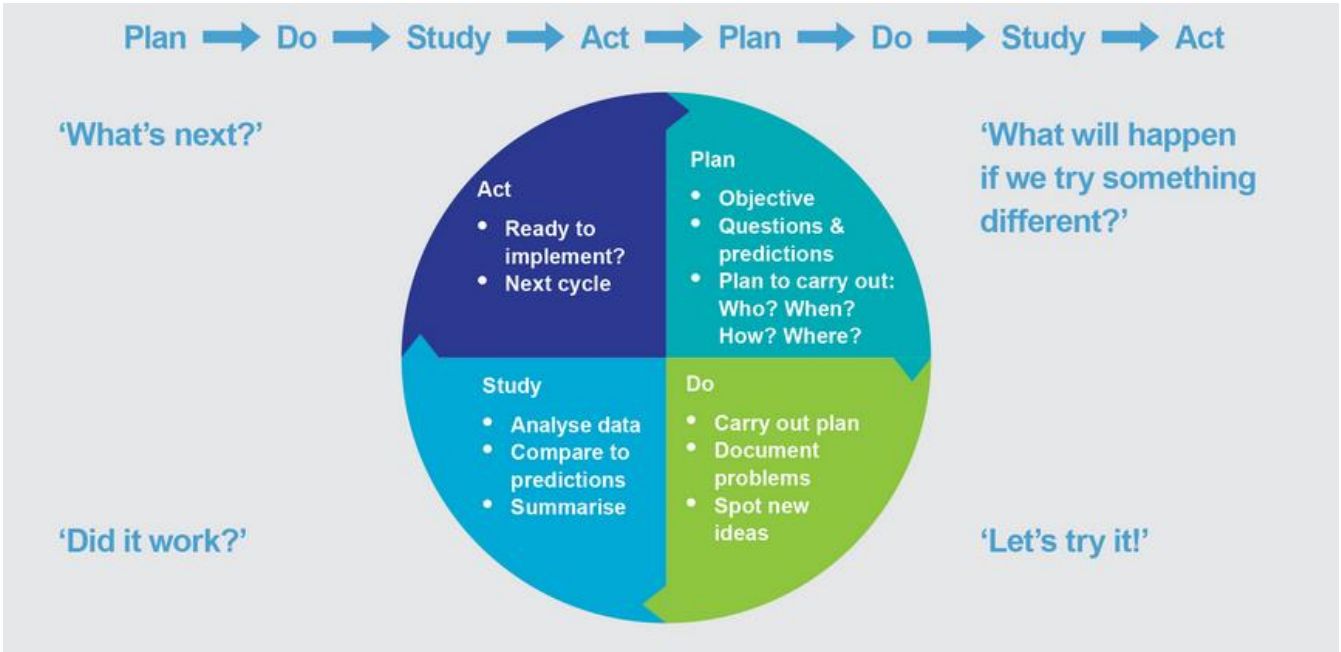


Figure 6. Plan-Do-Study-Act cycle (applied to Early Years education)

As the examples above show, the application of the theory of Continuous Improvement has moved beyond manufacturing and commercial benefits, and its ideas have become increasingly relevant and pertinent to the change process in continuing professional development (CPD). It could also be argued that improvement in professional practice can link to the ideas in the Matthew Effect which conceptualises accumulated advantage. (Section 2.3.6).

Elmore (1996) looked at the links between the creation of good ideas and their implementation in the classroom, arguing that the ideas had "very little impact upon practice" (p.1), and posited that this was because of teachers' limited understanding of the nature of knowledge. Elmore made a further link to the existing system of motivating teachers, suggesting that this favours those who already do reflect upon their practice. Elmore argues that education protects itself from the direct personal impact of changes by making changes in the external systems, rather than supporting all staff to reflect upon their own practice. Thus Elmore argues for norms for these external systems to secure their consistency, and proposes four such "external norms":

- Develop strong external normative structures for practice.
- Develop organizational structures that intensify and focus, rather than dissipate and scatter, intrinsic motivation to engage in challenging practice.
- Create intentional processes for reproduction of successes.
- Create structures that promote learning of new practices and incentive systems that support them (p.1).

Guskey (2002) poses the question of whether Professional Development makes a difference, comments upon the challenges of providing a meaningful and effective process for this, and proposes a five-stage model of evaluation, advocating that there must be clarity of desired outcome of the Professional Development programme: the principles explicated in Guskey's paper have some commonality for the current study.

The five stages of Guskey's model are:

- Participants' reactions
- Participants' learning
- Organisation support and change
- Participants' use of new knowledge and skills
- Student learning outcomes

In terms of change in professional practice, the most relevant stage is Level 4 of Guskey's model (whether the new knowledge or skill has made a difference to professional practice) and one element of the current study will explore the participants' responses in relation to the changes the process has brought to their practice. Level 5 considers the impact of the participants' use of new knowledge and skills upon the students and, although this is not addressed in the current study, this would relate to the positive outcome of appropriate early identification, and therefore intervention, for children with specific difficulties in the area of language.

Guskey also argues for three major goals in the professional development of teachers:

- change in the practices of teachers
- change in their attitudes and beliefs
- change in learning outcomes for students

These outcomes are represented by the model:

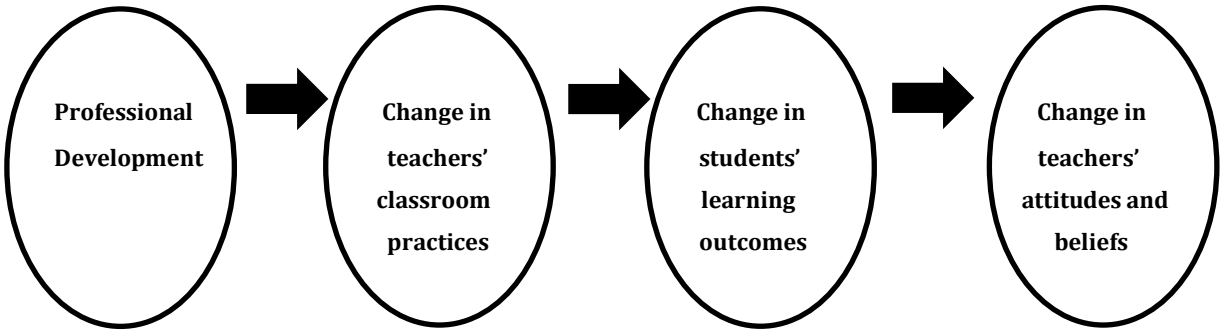


Figure 7. Guskey's Goals for Teacher Change

Guskey goes on to suggest that it is not the professional development *per se* which is the factor impacting upon the teachers' attitudes and beliefs, but the change is in response to the teachers' own observation of the students' learning and outcomes. Guskey concludes that the teachers believe in the new practices because they have seen them work, and argues that it is this feature of professional development which results in greater commitment to a new development, by the teachers. It is therefore proposed that assessment of the outcomes of professional development should include the perceptions of the learners.

A further aspect of professional development is that, although it may be an activity conducted on an individual basis, DuFour (2004) argues that the sharing of the learners' experience is what contributes to and creates a "learning community" (p.6), with Main's

associated "culture of enquiry" (1983, as cited in Lees, 2004, p.12). Earl and Katz (2002) stress that "making sense out of data and ruminating about how it contributes to deeper or clearer understanding in a group, brings a great deal into focus" (page 1020). The authors assert that the group dimension of this process results in the learners' knowledge being made public, thereby enriching colleagues' understanding through benefiting from the range of critical perspectives on the topic.

2.2.3 Summary of psychological theories of change and development

Having reviewed the literature relating to the progression of theories of change and the range of component factors, particularly with regard to professional development, the following section now moves into a consideration of professional practice, its elements, the studies which have explored this area, and the links between theories of change and the impact upon professional practice and professional development.

2.3 FEATURES OF PROFESSIONAL PRACTICE

2.3.1 Professionalism

Professionalism as a concept, and writing on the topic of Professionalism, appears to have expanded in the 1970s. Larson (1977) takes a sociological perspective of professionalism and writes of professions being characterised by their members having "special competence in esoteric bodies of knowledge" (p.x). In expanding this idea he continues by arguing that the various professions develop their own distinct identities through mechanisms such as professional registration and chartered status with a dedicated association, society, or college, which then create self-monitored and self-imposed ethical guidelines.

In a study exploring professional behaviour in medical students, McLachlan, Finn and Macnaughton (2009) devised a conscientiousness index to chart the students' performance in a range of objective measures (e.g. attendance, submission of work by a deadline), in an attempt to avoid the reliance upon qualitative judgements from respondents. However, the authors note that "measuring professional behaviour is problematic, not least because the concept of professionalism is difficult to define" (p. 559).

The literature on professionalism appears, on occasion, to use the terms *competence* and *confidence* together whilst acknowledging that one does not imply the other. It is important to recognise that these two features are distinct, and the current study focuses solely upon *confidence*, as it is beyond its scope to consider *competence* in practice. There will follow a short section related to professional competence since aspects of this may support confidence.

2.3.2 Competence in professional practice

Lauder et al. (2008) explored the relationship between self-report of *competence* and self-efficacy in pre-registration nursing students, concluding that there was a tension between a system which relied heavily upon self-assessment and the doubts which this study raised about the value and practical use of self-reported *competence*.

In the area of linguistic performance, Chomsky separates the notions of *competence* and performance, arguing that *competence* is the 'knowing', which can be perfect, and *performance* is the 'doing', and this will be subject to a range of influences. (Chomsky, 1965).

Lunt (2002) considers the question of "what constitutes fitness to practise for educational psychologists" (p.70), asserting that other professions base their 'fitness to practise' on a concept of competence which is itself derived from "a licence to practise, or its equivalent, and adherence to an ethical code" (p.70). Lunt was writing at the time of the British Psychological Society exploring mandatory continuing professional development (CPD), with this being a "means for revalidation of competence" (p.70). Lunt continues by arguing that a core of ethical practice should be a commitment to maintain this fitness to practice and therefore, by implication, a commitment to CPD.

Kennedy, Cameron and Monsen (2009) explore the assertion that outcomes for children can be improved through specific training in consultation approaches in order to enhance both "competence and capability" in educational and child psychologists (p. 603), and in the field of clinical psychology. Laidlaw and Gillanders (2011) argue for a pragmatic approach to the "attainment of competence" (p.146), and for training courses to respond to the pressures of financial constraints and changes to accreditation for the profession.

In the field of nurse training, Roberts and Johnson (2009) attempted to distil the differences between *competence* and *confidence*, initially arguing that the concept of *competence* remained elusive "despite many modern curricula claiming to be *competence* based, and to assess competencies of various kinds". (p. 467). Roberts and Johnson support this view by citing a number of papers which raise the issue of the studies which include patients' views, yet where the patients themselves may be unable to identify whether the practitioner is or is not competent (Watson, 2002; Norman, Watson, Calman, Redfern & Murrells, 2000). Nevertheless, Roberts and Johnson do conclude that 'skills' are at the heart of *competence* and go on to caution for the importance of knowledge underpinning these skills, and argue for the difficulty for students in recognising their own *competence*, possibly leaving them under-confident. Lauder et al. (2007 and 2008) expand on this idea by suggesting that the students lack *confidence*, and that this can be misinterpreted as lack of *competence*.

Moving from the more general arguments for professionalism, albeit with the caveats about the (arguably) interchangeable definition and use of the concepts of *competence* and *confidence*, the literature which more clearly considers the concept of *confidence* will now be reviewed.

2.3.3 Confidence in professional practice

Returning to the field of nursing training, Olesen and Whitaker (1968) asserted that *confidence* was important in nurse education, and cited the positive impact of their study where students were encouraged to adopt a confident style in front of patients, peers and teaching staff. More recently, Spouse (2003), Calman (2006) and Roberts (2007) have all argued for the importance of *confidence* in nurse education. The research attempts to explore the question of the relative impact of the various factors, creating a virtuous circle whereby students who appear more confident are allowed greater access to patients; increased *confidence* results in a mentor being more likely to allow the student to do more, thereby being involved in more learning opportunities; and when the student sees that they are able to do more, it increases their view that they are learning. Spouse argued that *confidence* appears to be gained through sharing common experiences and coaching from mentors, while Roberts cites her research as supporting the co-working with peers as being the route to confidence-building. Roberts and Johnson (2009) conclude that the routes by which *confidence* is gained are "at best *ad hoc*" (p. 468) and the authors go on to assert that, despite the central element of *confidence* in learning having been discussed for over forty years, there remains a lack of clarity on the nature of *confidence* and the role of educators in fostering *confidence*.

Passmore and McGoldrick (2009) assert in their study that coaching supervision, as a model of reflective practice, achieves a number of benefits, including coaching confidence, while Christiansen and Bell (2010) found that peer learning relationships enhanced confidence in nursing students.

Hagger and Woods (2005) addressed the apparent need for health professionals to have greater knowledge of law and ethics, and one part of a multifaceted programme was delivered to multiprofessional groups within organisations in the National Health Service. The researchers' evaluation showed that the multiprofessional group approach enhanced confidence in discussing ethical issues, with participants rating the day as 'excellent' (74-100%) and 'effective' or 'very effective' (84-100%) with regard to impact on professional practice.

In a study using pre- and post- self-evaluation scores, Hansford, Gill, McLaren and Krska (2009) showed that nurses' confidence in their relatively new professional task of medication review was increased by the tripartite approach of reading, self-assessment questions and a

training event. The data showed that at the outset none was *very confident* and 6 (16%) were *confident*, and following the intervention, 19 (50%) were *confident* and 8 (21%) *very confident*. However, despite the method in Hansford et al.'s study, which uses a similar pre- and post-evaluation rating to the current study, there are other clear differences between Hansford et al.'s study and the current study, including the difference in roles and activities between the two professional groups (nurses and EPs), the sample size (81 nurses were offered training), the self-evaluation being conducted by postal questionnaire, and the pre-and post- measures were taken 3 months apart, while the current study has three academic terms between pre- and post- self-evaluation.

In a study exploring effective means of 'targeted professional development' (p. 136) Harwood and Bork (2011) also used a pre- and post-questionnaire design to evaluate the effectiveness of a professional development workshop for 22 participants focusing upon selective mutism. Through this route the researchers aimed to enhance the confidence of education professionals in supporting children with these complex needs. The authors concluded that the workshop had enhanced the teachers' confidence in this area, and argue that this will be one contribution to an area with a 'dearth of literature' (p.136). Although this study employed the pre- and post- self-evaluation, the participants only had the workshop session, but no additional information, or additional assessment task, as in the current study. Furthermore, the researchers explained that their pre- and post- measures were only completed by 15 of the 22 workshop attendees (pre-workshop questionnaire) and 13 completed the post-workshop questionnaire. The researchers also note that "[r]esulting from the anonymous and confidential nature in which the questionnaires were administered, it is not evident if the same individuals completed both the pre-and-post forms." (p.8).

Studies which explore the assessment of current levels of professional skills, and their subsequent enhancement, appear generally to write in terms of various combinations of the terms *knowledge*, *understanding, skills* and *confidence*. In the United States, Ray (2011) investigated the variables contributing to speech-language pathologists' (SLPs') knowledge and confidence in the field of autism through a nation-wide survey. One factor in confidence was the number of students with autism on the SLP's caseload (i.e. experience), whilst a further factor was whether the SLP had been 'behaviorally trained' (p.3389). Those who had been trained had higher scores, although no statistically significant relationship was evident between the SLPs' knowledge and confidence.

McMillan (2011) writes of her aim to help Early Years senior staff to develop *knowledge*, *understanding*, *skills* and *confidence*, and stresses the importance of these facets in leading colleagues. In a six-month follow up study of nursing and nutrition students on a graduate

course, Abramovich et al. (2011) found that the students' initial knowledge and confidence did 'successfully translate into professional practice' (p. 226).

In a study of two approaches to enhancing teachers' confidence, either online or face-to-face teaching, Sankar (2010) found that both methods significantly increased teacher knowledge, but the face-to-face training also increased teacher confidence, where the online format did not.

In an exploration of the hypothesis that classroom teachers may not feel confidence in meeting the needs of children with chronic illness, Nabors, Little, Akin-Little & Iobst (2008) found that special education teachers were more knowledgeable about a range of medical conditions; however, they were not more confident than general classroom teachers in meeting the academic needs of the children.

2.3.4 Confidence in the practice of educational psychology

Despite the studies summarised above, which discuss confidence in other professional areas, a search of the literature from 2002 to 2015 has not yielded any studies exploring confidence as a concept or as one aspect of professional practice for educational psychologists working in the UK.

However, Passenger (2014) does consider the concept of confidence in the profession of educational psychology, but her exploration is of a profession-wide construct, looking at the confidence of the profession as a whole rather than the confidence of individual practitioners. Reid (2015) writes of educational psychologists but relates this to the impact of their professional practice upon the confidence of others i.e. in supporting teachers in behaviour management.

Ambrose (2014), writing in the United States, argues for the importance of membership of a specific 'Board of School Neuropsychology' and its associated training, to the enhancement of the confidence of its members in both "the assessment and the intervention domains" (no pagination specified), and Lazzaro (2014) describes a survey study which evaluated American school psychologists' perceptions of their confidence in responding to a school crisis situation.

Suldo et al. (2010) evaluated professional development for United States school psychologists working with students at risk of suicide. The authors found that the psychologists' knowledge improved 'reliably' immediately following the professional development, but at nine-month follow-up knowledge relating to assessment and intervention was retained, whereas knowledge relevant to prevention declined; however, psychologists' confidence remained stable over time.

2.3.5 Length of experience and its relationship to professional confidence

At the time of conducting the literature review for the current study there appeared to be no literature exploring whether confidence in professional practice had a relationship with length of experience. However, a more recent updating search of the literature reveals a small number of studies, though none in the UK, on a range of diverse topics which have only tangential relevance to the current study and are included briefly as being the only source of recent work in this broader area.

Not only do the studies further illustrate the lack of clarity of the term of confidence as used in professional practice, but the literature which does explore any relationship between length of service and levels of professional confidence introduces some new constructs e.g. job satisfaction (Chu & Sung, 2014),

A DfEE (2000) research report into teacher effectiveness asserts that "biometric data (i.e. information about a teacher's age and teaching experience, additional responsibilities, qualifications, career history and so on) did not allow us to predict their effectiveness as a teacher" (p. 8).

A study by Nota, Ferrari and Soresi, in Italy, did provide information about the impact of length of service of social and healthcare professionals; however, this was related to burn-out, "emotional exhaustion and depersonalisation" (p.129). Other studies took 'length of service' to mean time served in the Armed Forces, although one (Hogg, Hart & Collins, 2014) did explore the role of the EP with the service families and the increase the EP's input had made in the confidence of the families.

The most relevant study is work conducted by Bywater and Affourtit (2011) which considered the area of the increasingly ageing work force resulting from the UK Employment Equality (Age) Regulations Act (2006). The researchers looked at age trends across a number of behavioural dimensions (e.g. 'conventional', achieving, controlling and modest') finding that there is "a clear trend for older people to be more modest than younger workers", and the researchers concluded that that there is "no reason to discount [people who work beyond 70 or 75] as valuable human resources for the future" (p.17). Bywater and Affourtit's study's finding of increasing modesty with age might arguably be considered to provide a very tentative link to increasing confidence with increasing age. However, the direction of any change cannot be determined from this study since increased modesty could suggest either increased or decreased confidence.

In response to the change in the educational climate and the new SEN Code of Practice and its associated emphases, Kirven and Oland (2013) consider the contemporary economic

situation and the move to traded services, and address the question of "how the profession demonstrates its effectiveness and significance in promoting positive outcomes for children, young people and their families" (p. 72). The authors argue for the importance for the profession "to be confident about its role" and that "educational psychologists must have confidence in their profession's credibility and in what it can offer" (p.72).

2.3.6 The Matthew Effect

An additional factor to be considered in the development of *confidence* is the theory, initially from the perspective of the sociology of science, proposed by Merton (1968) and known as the Matthew Effect. The Matthew Effect highlights the inequity of praise and recognition given to the senior and junior authors of a scientific paper. From its original basis in the sociology of science, the notion of the Matthew Effect has evolved through being been further applied to the idea of 'accumulated advantage' where initial advantage begets further advantage, creating a widening gap, whether in wealth or in skills. This theory has since been applied in a number of areas, and its relevance to the current study is its application to learning, for example in the development of reading skills (Stanovich, 1986, Cain & Oakhill, 2011). The author of the current study suggests that the enhanced advantage of developing skills is likely to lead to increased confidence, and that this is a principle which could be applied to many areas of learning, including EPs' professional practice and children's language development.

2.3.7 Summary of confidence in professional practice

The concept of *confidence* in professional practice appears to be somewhat elusive and nebulous, and its lack of a clear and shared understanding should be acknowledged. However, the distinction between *competence* and *confidence* is an important one in the current study, and it has been argued that the evaluation of *competence* is beyond the study's scope. However, it is the component of *confidence* in practice, with the caveats outlined in the literature, which remains central to the area under exploration, most specifically in the area of children's language development. In order to enhance understanding of, and confidence in a specific area, it is argued that knowledge of the typical pattern of development is the foundation for identification of the possibility that there may be an issue for a child. The following section now considers the areas of both typical and atypical language development and the related issues.

2.4 LANGUAGE DEVELOPMENT

2.4.1 Definitions of Language

The Oxford English Dictionary (2006) gives the general definition of *language* as being "the method of human communication, either spoken or written, consisting of the use of words in a structured and conventional way". However, from the academic perspective, Harley (1995) suggests the possibility that researchers writing in the field of *language* either avoid defining it, or consider that it is a term too obvious to require definition, whilst Lyons (1977) holds the view that modern theoretical linguistics is the discipline designed to provide this definition.

The further complexities of the definitions of *language*, the relationship between *language* and thought, and the debates surrounding the main theoretical perspectives on language acquisition, are not directly relevant to this study and will not be pursued, although a brief historical outline is provided to set the context of work in this area.

One *caveat* included to ensure that this study's distillation of this extensive topic is seen in context, is to acknowledge that *language* is a significant component of *communication*, and to demonstrate the author's awareness of the range of additional features which contribute to successful communication. These include all aspects of non-verbal communication, plus additional psychological cognitive features of attention, memory, turn-taking, and physical and medical features such as presence of epilepsy or physical disability. Lewis (1987, 2003) presents the range of children's disabilities and examines the impact of each of these upon the developing child, including the impact upon language development. In addition, when considering *competence* in the area of communication there is a further important distinction which is that between receptive communication (understanding what is being conveyed by someone else) and expressive communication (being able to convey the message).

2.4.2 Psychological theories of language development

The focus and scope of the current study permit only a very brief acknowledgement of the theoretical context to the background of the study. In historical terms, four major proponents of theories of language development were Piaget, Skinner, Chomsky and Vygotsky. Piaget (1926), regarded language as an example of symbolic behaviour and asserted that its development was no different from development of other cognitive processes, suggesting that its development relied upon the child acting directly upon the physical world. Skinner (1957) was writing at a time when Behaviourism was a firm foundation for a range of theories beyond that of

language acquisition, and so the Behaviourist approach regarded imitation as being the main medium for language acquisition. Chomsky (1959) was a major critic of *Behaviourism* and, through citing many examples when a child is inventive with language, argued that imitation alone was an inadequate explanation. He went on to propose his alternative theoretical explanation by arguing that babies are born with an innate and inbuilt *Language Acquisition Device* (LAD) (Chomsky, 1972) and argued that a developing child's linguistic environment will only provide limited and restricted examples of language, and may not contain sufficient examples of that language to explain what the child is able to do. This led Chomsky to argue that the rules the child uses could not have been derived exclusively from the speech experienced in the linguistic environment, and therefore there must be some universal aspects of *language* which are innate. Chomsky's conclusion was that *language* then simply emerges as the child matures. Vygotsky (1962) held a contrasting view and, taking a *social constructionist* viewpoint, regarded the social world as being fundamental to cognitive development. He suggested that when children are mastering challenging tasks they engage in dialogue with adults and more expert peers; consequently he viewed *language* as being crucial for cognitive growth.

During the 1970s language development theories were further developed. Ferguson and Slobin (Ferguson & Slobin 1973; Slobin, 1973) also presented a view which centred upon innate factors within the baby and child: these researchers proposed that, just as newborns come into the world programmed to look at interesting items, especially faces, so babies are pre-programmed to pay attention to language, independent of any one specific language. Other researchers brought in the child's environment and experiences as being important, asserting that it was not sufficient simply for the child to hear language, but that the language directed toward the child should have a specific quality, characterised by being responsive to the child. For example, the concept of *motherese*, where the adult's language has a particularly sing-song rhythmical and accentuated tone, was argued to be a further requirement of successful language acquisition (Snow & Ferguson, 1977; Trevarthen, 2003).

Later authors argued that neither of these quite broad and polarised perspectives fully addresses all of the various facets of language acquisition and, as a result, the *Interactionist* approach emerged. This recognises that both the *Behaviourist* and the *Innate* theoretical stances, in combination with the impact of the environment, all contribute to an understanding of children's language development. Nelson (1998) robustly rejects the theorists who separate the development of cognition and language, and further supports the *Interactionist* stance by regarding language acquisition as being co-dependent upon cognitive development. The *Interactionist* view currently appears to be widely accepted and

it is subsequently and currently supported by researchers including McClelland (1987), Dickinson and McCabe (1991), John-Steiner, Panofsky & Smith (1996), Chapman (2003), and Leather & van Dam (2010).

2.4.3 The application of interactional theories of language development in the classroom

This shifting theoretical context has been mirrored in education with classroom practice being based upon a gradual move from the child language-learner being regarded as a passive recipient of language, to one where the child is an active participant (Gillard 2011). Taking a historical perspective Gillard notes that, until relatively recently, education in the United Kingdom focused upon the development of language through the teaching of the literacy skills of reading and writing. Gillard argues that this approach was based in the assumption of the time that children were already "able to speak" when they entered school, and so this established skill did not require further development.

The idea of the child as passive recipient of adult-led learning, and learning by listening (e.g. Barnes,1976; Mehan,1979) was being reconsidered when researchers noted the significant gains in learning through talk in the pre-school first five years of life, (for example Wells (1985); Tizard, Hughes, Pinkerton & Carmichael (1982), and Tizard & Hughes (1986, 1987)). The Plowden Report (1967) advocated an active learning approach, which was introduced into education in England, followed by the Active Learning movement (Svinicki & Dixon, 1987; Frater, 2000) which further supported this shift in classroom style.

Broadly in parallel to the movement towards Active Learning, writers in the UK and the United States began to identify the importance of oral language in the education of children: Cazden (1972), Goodman & Goodman (1976), Clay (1982), and Hall (1987), represent some of the writing at that time. It was argued that this importance of oral language reflected both the Active Learning approach, as well as the changing social and cultural context for the children.

Having set the historical context to the development of understanding of the need for the development in oral language, the literature review will now consider two differing models of language development.

2.4.4 Models of language development

Models of Language provide a framework of conceptualisation of the various factors involved in the skills of communication, and an assertion that knowledge of the structure of language will inform an understanding of where difficulties in language development might

lie, thereby enhancing the likelihood of detection. An outline of two recent models of the structure of language is presented to illustrate differing professional perspectives on *language*.

2.4.4.1 Stackhouse and Wells

Stackhouse and Wells' (1997) model brings a "within-child" perspective which is fundamentally physiological, by giving a micro-level breakdown of the individual constituent skills at the single-word level. The stages of the model identify the individual sub-processes and skills involved, and include both receptive and expressive dimensions:

Stage 1 - Input processing

To learn to say a word the child must: recognise similarities and differences between words e.g. tea/sea are different at the beginning, back/sock are the same at the end, sack/sock differ only by a vowel sound, and process these similarities and differences. This model argues that the child needs: good hearing; good attention and listening; and the ability to recognise and process sounds.

Stage 2 - Representations (stores)

A word is stored in memory as a pattern of sounds; this store is structured and organised and each word has its own place. Stackhouse and Wells propose a complex process in which words are grouped: words with the same first sounds; words with the same end sounds; words with the same syllable structure; words that rhyme; and words with the same vowel.

Stage 3 - Output processing

The child must: activate the movement of the speech organs such as lips, tongue and palate to produce the sounds required to form a word; plan the movements in the correct sequence and send accurate messages to the muscles; and the muscles and speech organs must then move in the required order to ensure the correct articulation of the word.

This model explains single word processing but, in addition, the researchers say that the child must also be able to put a sequence of words together to make a sentence which makes sense and is grammatically correct, as well as be competent in understanding the social use of language. However, it does not take account of (or assumes that these are favourable) the context and the quality or consistency of linguistic input and experience.

2.4.4.2 Bloom and Lahey

The Bloom and Lahey (1978) model shows the interrelation of what the authors consider to be the three key areas of language skills:

Form or **Structure** (Syntax) is the grammar of the language: it is demonstrated by word order, word endings and verb tenses, all of which are combined to create a grammatical sentence.

Content (Semantics) comprises the use of vocabulary and concepts, relying on the capacity to understand the meanings of the words in order to convey the correct message.

Use (Pragmatics) is the mechanism for the wide range of uses to which language is put, and the variety of ways it is used; it includes non-verbal accompaniments that are appropriate for the situation.

Bloom and Lahey represent their model showing the interrelationship between the three areas:

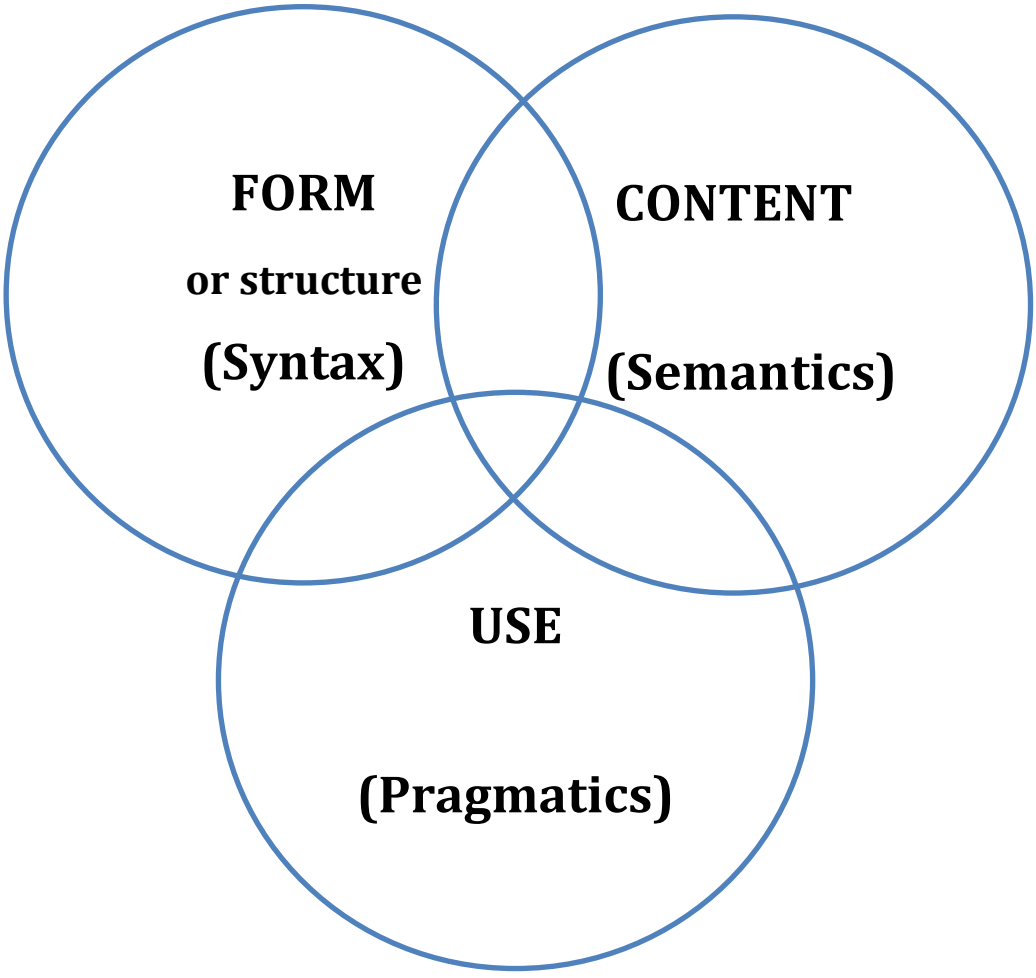


Figure 8. Bloom & Lahey's model of language (1978)

Bloom and Lahey argue that each skill area needs to be well developed to ensure that communication is a straightforward and successful process. However, it is important to note that this model does not clearly separate receptive and expressive language, nor does it take account of the additional psychological, cognitive communicative pre-requisites, including memory and the skills of listening and attention. Furthermore, no account is taken of the quality of input for the child as language-learner.

Costley (2006) asserts that theories are influenced by the cultural values and belief systems of the times of their writing, and also, and importantly for this study, reflect the professional perspective of the researchers contributing their views.

The two models cited above, (that of Stackhouse & Wells, and of Bloom & Lahey), illustrate the effect described by Costley, and reflect the differing perspective that these pairs of researchers bring to their individual conceptualisation of *language*. These two models imply differing understandings of the nature of *language* and, because of the differing conceptualisation, they give rise to differing explanations of where difficulties may arise in language development. As a result they therefore propose differing bases for intervention: either taking a "medical model" therapeutic and treatment approach, or one which is at a more broadly-based and holistic psychological intervention level. It is important to be aware of the fundamental perspective of differing models when considering the most appropriate way to understand, assess, and intervene in a child's language development.

2.4.5 Narrative skills

Narrative skills are described by researchers as being a fundamental component and essential feature of a competent language user. McCabe and Peterson (1991) regard narratives as serving an important function, regardless of the society in which they are produced, whilst Bruner (1990) suggests that it is through the narrative form that people both make sense of their own experience, as well as the route by which they represent themselves to others. Peterson (1994) states that these skills play an important role in education and that they are likely to be essential for future success at school. Botting (2002) asserts that narrative ability, sometimes continuous speech, is one of the most interesting and ecologically valid ways to measure communicative competence.

According to Peterson and McCabe (1994) the capacity to produce language beyond an immediate context is a crucial skill underpinning literacy acquisition, and McCabe and Rollins (1994) argue for the importance of the early detection of problems with narrative skills as this identifies the children at risk of potential difficulties with later literacy and general learning.

In a cross-cultural study comparing oral and literate approaches in families, Heath (1982) argued for the importance of narrative skills alongside literacy in the Early Years in developing adequate language use for adjustment to school.

Reese, Leyva, Sparks & Grolnick (2009) argue for the importance of young children developing narrative skills, and explored the impact of training parents in the skills of 'elaborative reminiscing', showing that this method enhanced skills more effectively than 'dialogic reading', a technique where the adult supports the child in telling the story, rather than simply reading to them. Reese et al. argue for the two approaches to be used in parallel to support skills development in pre-school children from low-income families.

Peterson & McCabe (2004) assert that there is considerable variation in pre-schoolers' narrative skills. In this study they explore the nature of parents' conversations with the children, looking at sub sets of narrative skills including overall complexity and the number of narrative components, e.g. contextual orientation, causality and evaluation. The authors argue for the importance of parent-child conversations and for a Vygotskian method of developing the child's skills through a process of structured support and interaction, which will gradually increment the child's understanding and linguistic development.

Narrative skills have been argued as being central both to effective communication (Norbury & Bishop, 2003) and also to future success in acquiring literacy skills (Michaels, 1981; Heath, 1982; Reese, 1995) thereby providing an enhanced opportunity for academic success. However, there is only a small amount of research in the UK relating either to the assessment of, or to fostering and developing such skills.

2.4.6 The role of language in cognitive development

A number of researchers have explored the role of language in cognitive development and the research in this area reflects the increasing importance of**,** and therefore the shift in emphasis towards**,** oral language in the classroom over the last decades of the 20th century, illustrating the weight of argument for the early detection of language difficulties.

Devitt & Sterelny (1999) argue that *language* has two central roles: to explain behaviour, and to inform us about the world, serving a range of functions in the areas of social, emotional, cognitive and psychological human discourse. As such, it should, therefore be regarded as an essential aspect in all areas of child development.

In support of the oral aspects of language within the educational context, Evans & Jones (2007) assert that "the oral competencies [which] children need to develop to become fully participative citizens in a highly mobile global context cannot be left to chance" (p.557). They suggest that previous school approaches have valued quiet working practices, but argue that these can only be in conflict with the development of good oracy[1] skills.

A 2011 project (Roulstone, Law, Rush, Clegg & Peters, 2011) was commissioned by the Government of the day as a contribution to the National Year of Speech, Language and Communication, also known as the Hello Campaign (Communication Trust, 2011). This project investigated the role of language in children's early educational outcomes. The findings indicated very strongly the power of the child's early communication environment where, in the researcher's terms, 'early' equates to 'before the 2nd birthday'. The researchers argue that the effects of this early communication environment are a 'more dominant predictor' of outcomes than social background; they continued by creating and supporting an argument for the two effects – communication environment and social background - being distinct from each other. Furthermore, once the communication environment was removed from the analytical equation, the authors concluded that there was no demonstrable association between social background and language development. Having established that a rich communicative experience in the first twenty-four months of life is a positive and powerful predictor of later educational outcomes, Roulstone et al. continued and extended their study, looking at the outcomes in cognitive development, literacy and attainments.

The conclusions of the Roulstone et al. (2011) report are based upon using a "large complex dataset […] from a prospective population study of [13,992] children […] born between April 1991 and December 1992, […] [and the sample] was found to have some under-representation of less affluent families, and fewer families from black and ethnic minority groups than is the case nationally …" (p. 16). The focus of the project was upon the maternal report data from questionnaires completed by mothers during the child's pre-school years. As this is a longitudinal study, these questionnaires have subsequently been completed by a range of people other than the child's mother, including mother's partner, and the child themselves.

Roulstone et al. comment upon the indices used for capturing adult social disadvantage as relying on "comparatively simplistic notions of poverty and social disadvantage using measures

[1] The concept of oracy was posited by Wilkinson (1970), who created it as a term to parallel literacy, arguing that this made it possible to write about the role of oracy in education, thereby raising the profile of oral language in the classroom.

such as the Index of Multiple Deprivation or […] maternal education" (p.10). However, having acknowledged the crude nature of the measures, the authors present details of the aspects of the communication environment which exert a positive influence, concluding that the impact of appropriate support for language development outweighs social disadvantage, and mitigates future social disadvantage, the "simplistic" basis of the measures of social disadvantage having been set to one side.

2.5 ATYPICAL LANGUAGE DEVELOPMENT

Having outlined the importance and value of enhancing typically developing language, it is the focus of the current study to explore the EPs' confidence in exploring children's language development. A component of confidence in practice in this area is to have an understanding both of typical language development, and sufficient knowledge of difficulties in order to recognise when a child's language development may be a cause for concern.

The academic literature in the UK over the last ten years broadly reflects two main theoretical stances to understanding language difficulties in children: either the strongly genetic (heritability) approach, or the neuropsychological perspective. A principal, but not a sole, proponent of the genetic approach is Professor Dorothy Bishop, and the leading, but again not sole, advocate of the neuropsychological approach is Professor Annette Karmiloff-Smith. These views are outlined here to provide a **c**ontext to the current study.

Bishop, North & Donlan (1995) argue for a genetic basis to language disorders from data derived from a mono- and di-zygotic twin study**.** In 1998 Dale et al.**,** working with Bishop, asserted that "most clinically significant language difficulties in children do not result from acquired brain lesions or adverse environmental experiences but from genetic factors that presumably influence early brain development" (p.324). Additional evidence is provided in further papers by Bishop (2001, 2002a, 2002b).

Karmiloff-Smith (2010) acknowledges that there are genetically-based developmental disorders, but her focus is upon how these disorders are explored to advance understanding. She asserts that the application of adult models of brain injury ('static' neuropsychological models in her terms) is inappropriate for the study of such disorders in children. On the Birkbeck College website Karmiloff-Smith explains this by arguing that the brains of atypically developing children "are not normal brains with parts intact and parts impaired, as is the case where there is acquired injury to a normal adult brain, but brains

that have developed differently through [pre- and post-natal] development." (Birkbeck, University of London, 2010).

Whilst it is helpful to be aware of these two main theoretical explanations for language disorders, it could be argued that the most important feature for the practitioner is an awareness and recognition of the distinction between language *delay* (when a child's language development appears to be following a typical path but not at a typical pace) and language *disorder* (when a child's language development appears not to be following a typical path), as this distinction can contribute to discussions on the potential impact and the planning of the most appropriate style of intervention.

2.5.1 Language delay

A language *delay* is characterised by the development of the elements of language (phonology, syntax etc.) following a typical developmental pathway, albeit delayed with regard to the pace of development of the child's peers. Language delay can be caused by a number of features, including: family interaction patterns (Thorpe, Rutter, & Greenwood 2003), genetic factors (Bishop & Leonard, 2000), chromosomal abnormalities, (Fowler 1990, Somerville et al. 2005), additional motor difficulties (Hill, 2001), abuse and neglect (Allen & Oliver, 1982) and hearing loss (Holm & Kunze 1969, Friel-Patti, Finitzo-Hieber, Conti & Brown 1982, Nicholas & Geers 2007), and may also reflect a more general developmental delay (Adamson-Macedo, Patel & Sallah, 2009).

2.5.2 Language disorder

A language disorder relates to language development following an atypical developmental pathway and significant levels of disorder are generally recognised at an early age, generally at pre-school age through developmental checks or parental concern. However, when the disorder is less severe, it may be masked by a superficial competence, yet accompanied by gaps in the typical developmental pathway of language acquisition (AFASIC & ICAN 2011). As with the pathway for typical language development, both delayed and disordered language generally demonstrate receptive skills in advance of expressive skills (e.g. Lahey & Edwards, 1996, Sénéchal, 1997; Stark & Tallal, 1981; Mawhood, Howlin, & Rutter, 2000).

It is argued that an understanding of the distinction between delay and disorder is relevant for EP confidence in exploring this area of children's development as it may help to inform hypothesis-generation and arriving at decisions on how to address the concerns or take them forward.

2.5.3 Terminology applied to language difficulties

When difficulties in the area of language development are described in the literature, there is some variability in the terminology used. In the 1960s the terms *aphasia* and *dysphasia* (the former being *without language* and the latter being *problems with language*) (Weiner, 1969) were used. These have evolved into the term *developmental dysphasia* in the 1980s (Wyke, 1978; Chiat & Herson, 1987; Clahsen, 1989), before DSM-IV (American Psychiatric Association, 2000) re-classified the term as *developmental language disorder*. Specific Language Impairment (SLI) appears to be the most widely-used term in the literature (for example: Moyle, Stokes & Klee, 2011; Luyster, Seery, Talbott & Tager-Flusberg, 2011; Dollaghan, 2011; Allen & Marshall, 2011; Bishop, Adams & Rosen, 2006; Bishop & Hayiou-Thomas, 2008; Bishop, 2007; Bishop, 2005; McArthur & Bishop, 2005; Bishop, Adams, Nation & Rosen, 2005), while Lindsay, Dockrell and Strand (2007) use Specific Speech and Language Difficulties (SSLD), and Ebert and Kohnert (2011) use Primary Language Impairment interchangeably with Specific Language Impairment.

2.5.4 Specific Language Impairment model

The discrepancy model seeks to explain learning difficulties, in this case language difficulties, in terms of a discrepancy between ability and achievement/attainment. (Bishop, 1994; Leonard, 2000). In this case it is used in the literature to characterise specific language impairment (SLI), which it regards as being a discrete area of difficulty, as opposed to language difficulties which reflect a broader and more general developmental delay. Underlying this is an opinion that the child in question is able to learn, or to demonstrate learning, in situations where language is not central to the process of a task or activity.

Leonard (2000) argues that the prevalence of SLI is around seven percent of all children, and defines SLI as being a "significant limitation in language ability [despite the absence of] the factors usually accompanying language learning problems – such as hearing impairment, low non-verbal intelligence test scores and neurological damage." (p.3). The AFASIC website explains that the term SLI relates to children with clear difficulties in spoken language, but "it does not include children who do not develop language because of intellectual or physical disability, hearing loss, emotional problems or environmental deprivation". (http://www.afasic.org.uk/)

On the ICAN website, in a section explaining the issues, this children's communication charity describes SLI in straightforward terms: "children with SLI are usually as able and healthy as other children in all ways, with one exception; they have enormous difficulty talking and understanding language; this is their main area of difficulty' and goes on to say that 'children with SLI won't learn language in the same way as other children, just by being spoken to and

encouraged. They need language to be taught. […] Without […] support, SLI may cause a child lifelong difficulties."(No pagination) (http://www.ican.org.uk/) and ICAN (2011).

2.5.4.1 Components of language which may be affected

As with the distinction between language *delay* and *disorder*, and the debate relating to specific language impairment, a summary of the components of language which may be affected is relevant to enhancing knowledge and confidence. As with many features of human development, language difficulties lie on a continuum from mild to severe (Schoder, 2011). In the following description of areas where language may not follow a typical developmental pathway, it can be seen that some of these may fall into the *delayed* category as well as the *disordered*. In this event, it is helpful if delay of a child's language be recognised and understood: if the difficulties do not fit the delay parameters, then disorder may be suspected by the observer or assessor (AFASIC Glossary sheets).

Referring back to Bloom and Lahey's (1978) model of *language*, and the other additional areas, these difficulties may be seen in any one of or combination of these areas:

Phonology

The ICAN website is an excellent resource for information relating to language needs. Specific difficulties with the phonology of a language relate to the auditory perception of the sound, the meaning that can be derived from hearing the sound, and the cognitive component of language processing. Discrimination between sounds can be an issue which then spills into difficulties with reading and writing. Even when literacy difficulties have been addressed, there can be a residual impact upon spelling, where "bizarre" combinations of letters may be seen in a child's attempt to capture the ultimately arbitrary nature of the letters and sounds which convey the spoken word (ICAN). (http://www.ican.org.uk/). An analogy is the difficulty which native Japanese speakers may find in distinguishing between the sounds of /l/ and /r/ in spoken English. A Japanese native speaker may say that they can hear no difference between the two sounds. (Ingram & Park, 1998; McCandliss, Fiez, Protopapas, Conway, & McClelland, 2002; Aoyama, Flege, Guion, Akahane-Yamada, & Yamada, 2004).

Articulation

This is not directly relevant for the current study beyond the awareness level, but is included briefly to complete the information about language components: if there are difficulties in the motor planning required to create a specific sound or pattern of sounds, speech

and language therapists may term this pattern of difficulties *verbal dyspraxia* (Stackhouse, 1992; Stackhouse & Snowling, 1992).

Lexicon

A language speaker's lexicon is the number of words they have within their knowledge of that language. One issue with this aspect of language could be that this is diminished owing to lack of access to rich linguistic experience. A further difficulty may be seen in "word-finding", where the child is unable to access the word at the appropriate time. Some children can be adept in masking this with a social "Oh you know the thing … " or similar (AFASIC, 2004). As researchers have shown that there is a linear relationship between language acquisition and cognitive development, a paucity of vocabulary is argued to have a causal impact upon the capacity for a child's progress in this area. Nation (2006) discusses the link between the number of words in an individual's vocabulary and their capacity to read a variety of texts, while Carver (2003), using a statistical analysis approach, compares reading-related sub skills of 'pseudoword decoding, word identification, spelling, listening and reading' (p. 127), and asserts that the relationship between vocabulary and reading comprehension is a 'highly reliable' predictive measure.

Semantics and pragmatics

Semantics relates to the actual meaning of the words: issues may arise in a number of areas, but generally the overall sense is one of the child being very literal and somewhat inflexible in their use of language. Literal use of language may also be evident in the understanding and retelling of a story.

Pragmatic difficulties are seen when a child may have a competent grasp of the structure of language yet find marked difficulty in using it appropriately to convey meaning. Difficulties in this area may lead to issues in social situations of not knowing how to be polite or socially appropriate, or not being aware of when to stop talking about a favoured topic, giving a sense of 'talking at' rather than 'talking to' a conversational partner. Issues may also be seen in turn-taking or showing interest in the other person's conversation. Rapin and Allen (1983) and Bishop (1989) were the early proponents of *semantic-pragmatic difficulties*, as a category of need, while authors, including Boucher (1998), have continued to discuss the usefulness of this as a category of need, as opposed to a description of a pattern of difficulty.

Listening and attention

Being able to listen and attend are fundamental aspects of language comprehension and a necessary foundation classroom skill; however, some children have a profile of distractibility in certain situations, which may result in some difficulties with sustaining attention. These issues

could be the result of a range of factors including, for example, trauma and attachment disorder (Schwartz & Davis, 2006), or certain health conditions such as the distracting impact of the itchiness of eczema (Lewis-Jones, 2006; Grillo, Gassner, Marshman, Dunn, & Hudson, 2006).

2.5.5 Summary of language development

Having considered the pattern of typical language development and the issues relating to atypical language development, the literature review will now focus upon prevalence rates of such language difficulties, to provide a rationale for the importance of the early identification of potential language difficulties.

2.6 PREVALENCE RATES AND IMPACT OF LANGUAGE DIFFICULTIES

2.6.1 The Bercow Review

The Review of Services for Children and Young People with Speech, Language and Communication Needs by Bercow (2008) highlighted both the importance of early identification and the need for a systematic approach to identification. If a child's needs are not identified and do not receive intervention, the Bercow review highlights multiple risks, including lower educational attainment, behavioural and psychological problems, and poorer employment prospects.

2.6.2 Prevalence rates

Law, Harris, Harkness, Boyle & Nye (1998) assert that speech and language impairment does not have a single definition, is varied in its presentation, and may affect as many as 15 percent of children, depending on the exact definition of the condition and the age group considered; they state that the median prevalence estimate is 5.9 percent of young children from birth to seven years. Additionally, Strand and Lindsay (2009) had found that identification was not uniform across the UK. Using the pupil-level school census information (PLASC) they analysed the data from 6.5 million school children in 2005, and found that "Chinese, Black African and Black Caribbean students are over-represented among those with Speech, Language and Communication Needs relative to White British students" (p.188), even after having applied appropriate statistical measures to control for additional factors.

Dodd and Crosbie (2011) state that about 15% of children 'fail to achieve age-appropriate language milestones' (p.604), and list the various areas of language which may be involved. These are: issues of intelligibility, poor understanding of others' speech, difficulty with the grammatical aspects of constructing sentences, accessing the words they require to express

themselves, use of socially inappropriate language, and difficulties with phonology (speech sound system), syntax (sentence structuring), semantics (meaning), and pragmatics (language use). The authors explain that these various 'functions may be impaired individually or in combination, and a deficit in one function often has implications for other functions' (p. 604).

Meschi, Vignoles, & Lindsay (2010) argue that there is a difficulty in determining numbers of children with specific profiles of needs in that large-scale analyses rely upon the data produced across the UK's schools. It may therefore be sensitive to the quality of data at the collection stage, and numbers of children in any given group may reflect the level of understanding of a child's needs.

Against this backdrop of an identified need for early detection of language difficulties, it is posited by the author of the current study that – through personal observation – EPs may not always be confident in the area of initial identification and assessment of potential issues in children's language, and also that the educational psychologist is in an (arguably) unique role in meeting and working with children who have a range of presenting difficulties. As will be evidenced through the Literature Review, some children will have underlying difficulties with language development, either as the primary component, or as a secondary, yet contributory element in their learning profile.

As part of the initial formulation of a child's learning profile, it is again argued that EPs can contribute by reviewing the child's language development at the point of initial referral. However, personal observation over many years, along with specific professional opportunities to work as an EP with children with SLCN, and a contemporary survey of the group of EPs as part of the current study**,** has shown that this is an area in which a proportion of EPs feel under-confident in exploring this aspect of a child's development.

Researchers argue that there is evidence of significant numbers of secondary school students with speech, language and communication needs (SLCN) in areas of social deprivation (Spencer, Clegg, Stackhouse & Leicester 2006; Spencer, 2007. In a study of 15 students at risk of exclusion from school on account of behaviour issues, Clegg, Stackhouse, Finch, Murphy and Nicholls (2009) found that 10 of these 15 students had significant and severe language difficulties. This research was also the basis for a report for ICAN (the *ICAN Talk* series) with the purpose of contributing to the Charity's role of 'exploring contemporary issues in children's speech, language and communication needs' (p. 24). As such it provides a research background to raising awareness of these issues; however, conclusions drawn from the small sample of 15 should be viewed with caution, and in conjunction with other research in this area.

In a further exploration of the profile of needs in the secondary phase of education, and with a larger sample size, an audit of 200 pupils in an inner city secondary school revealed that 75 percent of the students were found to have SLCN at a level sufficient to impact upon learning, behaviour and relationships (Sage, 2005). This work also provided the basis of one of the *ICAN Talk* series (ICAN).

Further data from PLASC (2007) (previously Pupil Level Annual School Census and in 2007 re-named National Pupil Database, 2011) show that the most prevalent type of Special Educational Needs (SEN) in children with a Statement of SEN is speech, language and communication needs (SLCN), at around 25 percent, with behaviour needs the next most prevalent at 18 percent. Data from children in secondary education shows a drop in SLCN and increase in Social, Emotional and Behavioural Difficulties (SEBD) (Communication Trust, 2011), with a possible explanation being that there is an increased likelihood of young people in secondary education being mis-"categorised" and their SLCN needs not being recognised. A further factor may be that, in some areas, Speech and Language Therapy services work with schools up to the end of the primary phase, but generally do not continue into secondary education. Furthermore, the secondary curriculum, as well as the social aspect of school, both demand more complex language understanding and use.

Language difficulties and additional learning, emotional and behavioural needs

Adamson-Macedo, Patel and Sallah (2009) argue that speech and language difficulties can be indicators of other cognitive, social and developmental problems and Cross (2011) argues strongly for the role of language (whether verbal or as thought) in mediating emotions, linking difficulties in the area of language processing or production with inappropriate behavioural responses to the resultant frustrations.

Dockrell (2001) asserts that language is a "sensitive indicator of a range of developmental difficulties, yet the accurate identification of children who are experiencing delays or disorders is problematic" (p. 74). In a more recent study, from the speech and language therapy perspective, Adamson-Macedo, Patel & Sallah explored the possibilities for extending assessment tools in use, in an attempt to lower the age of identification of difficulties (2009). The authors conducted a study with 244 pre-school children in the Midlands, asserting that speech and language difficulties can be indicative of other cognitive, social and developmental problems.

The Bercow Review (2008) and the Year of Communication (2011) has resulted in an enhanced focus upon speech, language and communication needs, and it is now possible for follow-up and longitudinal studies to be conducted and completed. Lindsay, Dockrell and Strand (2007) conducted a study which compared the behavioural features (Behavioural, Emotional and

Social Difficulties, BESD) in a group of children who had identified speech, language and communication needs. The authors asserted that their conclusion that BESD persists into secondary education for this group of children was supported, whilst also noting the impact of factors within the child's context. The researchers use the term, not seen elsewhere, of SSLD i.e. specific speech and language difficulties, although the text suggests that the term is equivalent to the more widely-used speech, language and communication needs (SLCN).

According to Stringer and Lozano (2007) the link between language impairment and behaviour difficulties in children and adolescents is "well-established" (p.9) and a number of recent studies tend to support this view. Working with an adolescent group, Snowling, Bishop, Stothard, Chipchase and Kaplan (2006) examined the psychosocial outcomes at the age of 15 years for children who had a history of speech-language impairment at pre-school age. They note that there is already a heightened risk (albeit not quantified) of psychiatric disorder for children with this profile of difficulties. However, the study, involving 71 young people, demonstrated that if the difficulty had resolved by the age of 5½ years, (although somewhat confusingly the authors now term this group as having language *delay* rather than *impairment*), then the possibility of psychosocial problems was minimised and the children had a "good outcome". Other learning profiles are provided: for example, the authors grouped children with attentional and social difficulties, although it is not clear whether these are two distinct groups or one group with four factors, and children with more persistent difficulties and "low IQ", concluding that they had a greater risk of psychiatric morbidity in adolescence. As the authors note "the present data cannot address whether the social impairment seen in this sample is a case of social adaptation in the face of lifetime communication difficulties, or whether both problems are associated with deficits in social cognition, as might be expected if there are continuities with autism-spectrum disorders" (p. 764). They go on to note that the psychosocial outcomes in adolescence of children with a pre-school history of speech-language impairment were relatively good, unless they experienced a language impairment that persisted into the school years. The findings of the study suggest that children with language difficulties at school entry are "a vulnerable group who require not only language intervention but, in some cases, also emotional and behavioural support". (p. 764).

In further work with younger children, Botting and Conti-Ramsden (2000) assessed the emotional/behavioural status of over 200 children in National Curriculum Year 2 with a follow-up in Year 3. They found that the increase in issues of behaviour related to the subgroups of language difficulty which they had divided the children into, concluding that, generally, children in Language Units do not have "clinical-level behaviour problems" (p.105). However, when looking at their sub-groups within the Language Units, those children in the expressive language

difficulty group showed the lowest levels of behaviour issues, followed by the children with mixed expressive and receptive issues, while the children with complex receptive and complex language impairments were the most likely to score "over the clinical threshold" (p.105) for behavioural issues.

2.6.3 The potential long-term impact of language difficulties

This section provides an overview of the available research into the long-term impact of language difficulties, and illustrates a clear demarcation and dichotomy in the conclusions drawn from a range of studies. The evidence is grouped according to the conclusions drawn. Possible reasons for the discrepancy are included following the summary of the studies. The number of available studies appears to dwindle after 2009.

Stothard, Snowling, Bishop, Chipchase and Kaplan, (1998) assert that longitudinal studies of young children with Specific Language Impairment (SLI) generally agree that long-term outcomes are worse in those who have more severe problems. These researchers judge severity both in terms of the level of performance on a given language measure, and the range of language functions that are affected. They also state that age of identification is critical and that there is much interest in identifying children as young as possible, on the grounds that early intervention is likely to be more effective than later initiatives.

The recent work by Roulstone et al. (2011) provides clear conclusions linking the child's language levels up to their second birthday, their linguistic environment, and their family's extent of deprivation, and correlates these factors with academic outcomes.

However, a study exploring the outcomes for children at three and four years old who had an identified language delay at two years of age, concluded that children whose language difficulties persisted were not necessarily those with the most severe initial difficulties, clearly adding an element of confusion to the argument for early detection and intervention. The researchers assert that this mirrors other work in this area, stating that it is consistent with previous reports of frequent spontaneous resolution of delayed language in children below school age (Dale, Price, Bishop & Plomin, 2003). Nevertheless, when having regard for the 60 per cent figure in Stothard et al.'s 2006 study, this supports the approach which argues that early identification is a positive process.

Giving a clearer conclusion to outcome prospects, a study conducted in the United States found that approximately 5-7 percent of kindergarten children have speech, language and communication needs (SLCN) as their primary need (Tomblin, Records, Buckwalter, Zhang, Smith, & O'Brien, 1997) and**,** in a follow up study at fourth grade (equivalent to UK National Curriculum Year 5), having corrected for regression to the mean as a possible factor in

comparing data in this and other studies, Tomblin, Zhang, Buckwalter and O'Brien (2003) found that those children with the most significant impairments at kindergarten age were the most likely to have ongoing difficulties. The researchers posited that these difficulties would persist throughout primary education.

Clegg, Hollis, Mawhood & Rutter, (2005) assert that the studies of the longer-term outcome of children with language difficulties mostly depict difficulties into adulthood, with elevated rates of unemployment, social isolation and psychiatric disorder. They note that most studies tend to focus on outcomes of those with severe problems, where comprehension as well as expressive language is affected, and the language issue is clearly identified.

Buschmann et al. (2008), explored the dilemma of whether to conduct a full 'diagnostic work-up' at age 2 or whether the 'wait and see' strategy is adequate for children with a developmental language delay. These researchers concluded that, although a 'substantial proportion' of late talkers will catch up, the data from their study support the view that a general 'wait and see' approach is not justified in young children with language delay.

2.6.3.1 The Youth Justice system

Bryan (2004) explains that there are no systematic surveys of the UK prison population with regard to the possibility of language difficulties. Bryan used data from several sources to conclude that it was likely that a significant number of prisoners might have limitations in their speech, language and communication abilities.

Subsequently, Bryan, Freer and Furlong (2007) used a range of assessments on a juvenile population, finding that on the TOAL-3 (Test of Adolescent and Adult Language n.d.) 66-90% of juvenile offenders in the sample had below average language skills, with 46-67% of these being in the poor or very poor group. None of the participants reached their age equivalent on the BPVS (British Picture Vocabulary Scale, 2009), but most of them reached the 12-year and above threshold on the TROG (Test for Reception of Grammar, 2003). The researchers comment on the range of factors beyond language difficulties that might have impacted upon their progress**,** for example those young people who had been in the Looked After system. However**,** the percentages give an indication of the degree to which these figures exceed the rate in the general population.

NACRO (the National Association of Care and Re-settlement of Offenders) argues that speech and language difficulties put young people at greater risk of entering the Youth Justice system and, once they are in the system, they then experience further difficulties in understanding the range of processes (NACRO, 2009) and the Royal College of Speech and Language Therapists (RCSLT) produced a report entitled Locked Up and Locked Out, which

explored the issues of speech and language needs, and argues strongly for the role of the Speech and Language Therapist in the prevention of vulnerable young people entering the Youth Justice system (Royal College of Speech and Language Therapists, 2009a). In a further evaluation of the impact of a range of learning difficulties and the Youth Justice system, the Bradley Report included language needs as one element of needs having a negative effect (Bradley, 2009).

2.6.3.2 Additional mental health issues

Conti-Ramsden and Botting (2004) found that 64 percent of a sample of 11-year-olds with SLI scored above a clinical threshold on a questionnaire for psychiatric difficulties, and that 36 percent of the children were regularly bullied, compared with 12 percent of typically-developing children. They concluded that the greatest risk for the children appears to be for attentional problems and social difficulties, rather than conduct or emotional disorders. Looked at from the opposite perspective, an earlier study of children attending psychiatric clinics found that 28 percent had hitherto undetected language difficulties that were moderate or severe (Cohen, Barwick, Horodezky, Vallance, & Im, 1998). These researchers were unable fully to explain the reason for this association, though they argued that one mechanism could be through the stress induced by social rejection and isolation, both of which are common in children with language difficulties.

The Royal College of Speech and Language Therapists emphasises the importance of addressing speech and language needs to avoid secondary mental health issues, (Royal College of Speech and Language Therapists, 2009b) and the website www.patient.co.uk states that over 75% of people with mental health disorders have communication difficulties (Patient.co.uk, 2015).

2.6.4 The long-term financial argument

The Royal College of Speech and Language Therapists (RCSLT) produced a Matrix Report (2010) for commissioners of their services, making the financial case for the benefits of providing speech and language therapy (SLT) to children with SLI using the following format:

- Every £1 invested in enhanced SLT generates £6.43 through increased lifetime earnings.
- In comparison to routine SLT, enhanced SLT is estimated to result in an additional 5,500 students achieving 5 or more GCSEs A*-C (or equivalent). The resulting benefit of providing enhanced SLT for all children aged 6 to 10 who currently have SLI exceeds the cost of the SLT by £741.8 million.

- Continued implementation of SLT for those children entering this cohort – children with SLI turning 6 years old – would generate a net benefit of £148.4 million per year in subsequent years.
- SLI is a condition involving disruption in one or several parameters of language: sound system, signalling word endings, grammar, meaning and/or intended meanings.
- It is estimated that approximately 203,000 children 6 to 10 years in the UK have SLI requiring SLT.
- The benefits of SLT are derived from improved communication leading to improved educational achievement and in turn increased adult earnings.
- Further breakdown of the net benefits shows that estimated annual net benefit is £623.4m in England, £36.1m in Wales, £24.2m in Northern Ireland, and £58m in Scotland. (p.7).

The RCSLT Matrix Report also provided similar lists of figures for other areas of expertise from Speech and Language Therapy. These figures, albeit from a different professional perspective, lend considerable support to the argument for early identification of language difficulties to enable suitable intervention. They give some indication of the extent of the issue and, it is argued, illustrate the potential for some contribution from an allied professional group e.g. educational psychology**,** in having an awareness of the level of need and the potential to be able to flag the possibility of language issues at an early stage.

The Communication Champion, Jean Gross, undertook a wide-ranging review of the position in 2009, and the developments achieved by the end of the Year of Communication (Communication Trust, 2011). In her 2011 final report, Gross is clear in her expression of concerns about the poor long-term outcomes if childhood language needs are not addressed. These language needs include difficulties with reading and with understanding what has been read, and she goes on to state that a majority of pupils (two-thirds) at risk of exclusion have subsequently been found to have language needs. On the basis of extensive survey information Gross concludes that:

> *Research shows that children who had a specific language difficulty at the age five are twice as likely to be unemployed in their mid-thirties as those from similar backgrounds, but with normally developing language. (p.9).*

Lindsay, Dockrell, Law and Roulstone (2011) also cite their research illustrating the difficulties at school and into the future for young people with unmet speech, language and

communication needs. For further details see the report by the Communication Champion, and the 2011 report by the authors above.

Law, Rush, Schoon and Parsons (2009) explored the outcomes for children with language difficulties at age five into adulthood. In adulthood, the researchers found risk factors in both demographic and biological elements, and that the children with a more generalised language difficulty had a less successful development of skills than those who had specific language impairment (SLI). The authors conclude that there is a strong case for the identification of children with these needs and the development of appropriate support and interventions.

However, a report by the same authors one year later found a difference in outcomes between children with 'generalised language difficulty' and those with specific language impairment. This may not be unexpected, as the language component is included in the group with additional learning needs.

The Centre for Longitudinal Studies 1970 British Cohort Study (CEDAR, ongoing) is a longitudinal study of 17,000 people born in a single week in 1970. In the work which provided contradictory conclusions, Schoon, Parsons, Rush & Law (2010) conducted a 29-year follow up study of 11,349 children from the 1970 British Cohort, where those who had identified receptive language difficulties at age five were re-tested at age 34 on their basic literacy skills. The researchers found that, even though the children with the language difficulties had a relatively disadvantaged home life in childhood "in terms of socioeconomic resources, the education level of their parents, [and] their exposure to a stimulating early literacy environment […] the majority of these children develop competent functional literacy levels by the age of 34." (p. 459).

2.6.5 Studies concluding spontaneous recovery

There have been several studies of 'late-talkers', identified at age 18-24 months because they are producing very few words e.g. Weismer, Murray-Branch & Miller, (1994); Thal, Tobias, & Morrison, (1991); Rescorla, Mirak, & Singh, (2000); and Williams & Elbert, (2003). Most such children appear to be what Paul (2000) calls 'late bloomers', in that their outcome is similar to that of other children when followed up into middle childhood. A key factor appears to be comprehension level: those who have poor understanding of what others say are less likely to catch up spontaneously.

A UK study conducted by Stothard, Snowling, Bishop, Chipchase & Kaplan (1998) provides mixed evidence on outcomes. The researchers looked at children who had specific speech and language problems at four years of age, and who were then seen at 4½, 5½, 8 years and 15 years of age. Around 40 percent had essentially 'normalised' (the term used by Stothard et al.) by 5½ years, with generally good long-term outcome, although minor literacy problems were found in

some. However, the 60 percent who still had measurable language problems at 5½ years were not so successful, and the gap between them and other children widened as time progressed.

In a further study providing arguments both for and against spontaneous recovery, Snowling, Bishop, Stothard, Chipchase & Kaplan, (2006) assert that children with speech and language impairments run a greater risk of having psychiatric disorders, having assessed these using a psychiatric interview with supplementary questions. The authors argue that some of these psychiatric disorders are more likely to have a psychosocial impact, for example Attention Deficit Hyperactivity Disorder (ADHD), than others. They also found that children whose difficulties were milder, and not requiring special educational provision, had better outcomes. They concluded that when the language difficulties had resolved by the age of 5½ years, there was no "excess psychopathology" (p.759). If the children did have language difficulties persisting at this age, then the more severe and the 'lower non-verbal IQ', the higher risk of psychiatric issues in adolescence.

To add further confusion to the studies on outcomes, in the only study which provides information about predictors of outcome, Bishop and Edmundson (1987) compared the outcomes for a group of 87 children with identified language impairment. They assessed the children at 4, 4½ and 5½ years old. In 37 percent of the children their language disorder had resolved by the age of 5½, to the extent that they were indistinguishable from the control group, but when consideration was restricted to the 68 children whose nonverbal ability was within 'normal limits', this figure rose to 44 percent. Bishop and Edmundson assert that the outcome could be predicted with 90 percent accuracy on the basis of test measures obtained at age 4; they noted that the best predictor was the ability to tell back a simple story to pictures i.e. The Bus Story (Renfrew, 1969, 2010).

2.6.5.1 Comments on the available research

The studies charting the long-term outcomes of childhood language difficulties lend some support to the notion of persistence of the difficulties and their impact into adulthood; however, they are not unequivocal, and there are some strikingly contradictory conclusions which leave unanswered questions.

Consideration of the literature indicates the likelihood that there may be several factors impacting upon the conclusions drawn, and that the various studies indicate discrete groups of children with differing criteria for inclusion in each study. For example:

- Children who have severe language difficulties and are supported through specialist provision (Botting & Conti-Ramsden, 2000).
- Children whose difficulties are mild (though apparently have been detected), but are not in specialist provision (Snowling, Bishop, Stothard, Chipchase & Kaplan, 2006).
- Children with 'unmet needs': it is unclear whether they are unmet because the difficulties are undetected, and therefore it is unclear as to whether they were mild or severe, or whether they have been detected but have not been addressed? or possibly detected in retrospect (Cohen, Barwick, Horodezky, Vallance & Im, 1998; Bryan, 2004; Bryan, Freer and Furlong, 2007; Lindsay, Dockrell, Law & Roulstone, 2011).
- Children whose language difficulties actually reflect a broader and more generalised learning difficulty yet are still described as children with language difficulties, although not with Specific Language Impairment.

Further variables could be difficulties of quantifying the extent of the difficulty and whether or not it is discrepant (and the extent of discrepancy if so) with the general learning profile of the child, age of detection of difficulties, along with the range of other variables such as attachment difficulties or being a Looked After Child, known to impact upon a child's developmental trajectory.

In some studies, many children make good, spontaneous progress after a late start in language, which confuses the argument for early identification. Based upon these findings some children would be identified early, receive specific intervention, yet would anyway have spontaneously developed to arrive at the same stage as their typically-developing peers.

It is beyond the scope of the current study to explore these discrepancies further. Nevertheless, it is suggested that there is a greater body of robust research evidence illustrating poor long term outcomes for children with language difficulties, and that this outweighs the evidence suggesting spontaneous resolution of difficulties.

The basic premise of the current study is that there is sufficient evidence from studies based upon retrospective data, contradictions notwithstanding, to support the suggestion that: there are undetected early language difficulties in the school-age population; that EPs have a role in recognising them; and that it is a worthwhile focus to develop EPs' skills and confidence to detect and therefore achieve early signposting of children to specialist assessment and intervention services. The complex nature of research findings may add weight to the experience of limited confidence for practising EPs and therefore intervention that leads to greater confidence, as explored in this thesis, appears to have significant face value.

2.7 IDENTIFICATION, ASSESSMENT AND INTERVENTION

2.7.1 Importance of early identification

When language development is an issue, there are two main aspects of language which require exploration: expressive language and receptive language. Expressive language encompasses the child's capacity to express their thoughts, feelings, needs and wants, to use language to provide some control over their environment, and to regulate their emotional responses with language (as self-talk). Receptive language is the child's ability not only to hear, but also to understand, what is being said. This is partly reliant upon the speaker's sensitivity to the child's developmental stage, but also relies upon the child's capacity to process, that is, to perceive and make sense of the received sensory input.

Roulstone, Peters, Glogowska & Enderby (2008) conducted a study looking at the outcomes from speech and language therapists' initial treatment decisions with pre-school children. At follow-up around four years later, the study shows the high levels of effectiveness of the earlier decisions, in terms of *sensitivity* (i.e. did the child have difficulties) of 0.85 and a *specificity* (i.e. the recognition of which area of language) of 0.61. This study not only illustrates the effectiveness of the speech and language therapists' early decisions, but also lends some support to the possibility of a small number of children not being identified.

Law, McBean and Rush (2011) looked at patterns of service delivery for language difficulties, and found that almost 40% of a sample of 138 socially disadvantaged children had delayed language development, with 10% having severe language needs. The authors explain that the children's access to appropriate services was very good, but also suggest that there was a group of children who met the criteria for specific language impairment, yet were not being referred to speech and language therapy.

The purpose of the current study is to explore EPs' perceptions of, confidence in, and approach to exploring children's language development and its assessment, and to determine whether EPs' confidence in assessing language would change following a training session in language difficulties and the application of a specific assessment activity. As such the study has a focus upon the child's expressive language. However, within any conversation with a child, an EP is likely to be aware of the child's broad level of receptive language, that is, how well the child is understanding, and whether language needs to be simplified for them or supported with sign or gesture. In the 2002 Division of Educational and Child Psychology (DECP) professional practice guidelines, Frederickson, Webster and Wright (1991) were quoted as having asserted that 'We believe that psychological assessments should involve a creative investigation of a broad range of hypotheses that builds on research from all areas of psychology.' (p.24). EP practice usually

involves the process of hypothesis-formation: if any difficulty with a child's language is detected, then the contributing factors outlined above may then be considered, as they could be central to the formulation of the child's learning profile and provide a basis for decisions about the most appropriate route for intervention.

2.7.2 Assessment of children's language

A number of published assessment tools are available and it is beyond the scope or purpose of this study to review them in any depth. The broad conclusion drawn from reviewing the views of authors in this field is that no single assessment tool is sufficient to capture the complexities of language development. Furthermore, the focus of this study is EPs' confidence in exploring children's language development, thereby potentially contributing to the early identification of potential issues; it is not intended to be a specialist in-depth assessment.

A brief but not comprehensive overview of the (arguably) most popular language assessments that are in current use include:

Table 3. Examples of language assessments in current use

Assessment	Notes
WISC (Wechsler Scale of Intelligence for Children) Language subtests	Standardised psychometric assessment available to psychologists Age range 4:00 to 16:11
BAS (British Ability Scales) Language subtests	Standardised psychometric assessment available to psychologists Age range 3:00 to 17:11
CELF (Clinical Evaluation of Language Fundamentals)	Standardised assessment widely used by speech and language therapists Age range 5:00 to 16:11
WIAT (Wechsler Intelligence Individual Achievement Test) Language items	Standardised psychometric assessment Age range 4:00 to 16:11
BPVS (British Picture Vocabulary Scales)	Used by a range of professionals Age range 3:00 to 16:00
Teaching Talking Profile	Used by a range of professionals and by families Age range 1:00 to 8:00
TROG Test for Reception of Grammar	Age range 4:00 to Adult
CTOPP Comprehensive Test of Phonological Processing	May be used as part of assessment of literacy difficulties Age range 4:00 to 24:11
CCC-Children's Communication Checklist	Age range 4:00 to 16:00

See also the ICAN website page Talking Point for further assessments (Talking Point, 2015).

2.7.3 Intervention in language development

The purpose of the current study is to explore EPs' perceptions of, confidence in, and approach to exploring children's language development and its assessment. However, a brief summary of the range of initiatives devised and implemented by the Government (and others)

over recent years lends support for the argument that early detection and intervention is an important process for supporting positive longer-term outcomes.

The wide range of initiatives arguably gives an indication of the degree of importance which the nation attaches to the development of language skills, and the need to ensure that these have the greatest possible enhancement at the earliest stages. Such Government-led initiatives are supported by relevant professional organisations e.g. the Royal College of Speech and Language Therapists, and two high-profile Language-based Charities (ICAN and AFASIC) provide further impetus to this area of children's development. Initiatives during the last eight years include: Birth to Three Matters (2002), Chatter Matters (2006), the National Strategies (2007), Every Child a Talker (2008), the Early Language Development Programme (2011), Every Child Understood (2011), Talk to Your Baby (n.d.), and the provision of Sure Start Children's Centres (n.d.).

2.7.4 Other professional groups identifying language difficulties

Although Speech and Language Therapy is the central professional service for the assessment and intervention for speech and language difficulties, their referrals rely upon identification from other professional groups, where colleagues work with the children from birth throughout their childhood. Clegg (2011) asserts that, in the UK "there is much concern about the educational progress of children from areas of significant social disadvantage entering primary school with impoverished language skills. These children are not routinely referred to speech and language therapy services"; Clegg goes on to note that the children are therefore dependent upon the "education practitioners in schools to deliver interventions" (p. 151) and, arguably by inference, the children are also reliant upon the school-based practitioners to identify their language needs.

Identification of such difficulties is therefore reliant upon a range of professional groups having sufficient knowledge to recognise when a child's language is not following a typical developmental pattern, or at a typical developmental rate. These professional groups include: Health Visitors, Paediatricians, Early Years education staff, teachers and other school staff, General Practitioners and, though not an associated professional group, parents. It is suggested that most EPs would also consider themselves to be amongst this group.

2.7.5 External factors: current legislation and professional registration

Current Government legislation (Children and Families Act, 2014) is driving the process of 'cooperation' for improving collaborative working between agencies from education, social services and health. The associated statutory guidance (DfE and DoH, 2015) stresses the

importance of early identification, and the Schools' guide to the Code of Practice (DfE, 2014) states that the "benefits of early identification are widely recognised - identifying need at the earliest point and then making effective provision improves long-term outcomes for the child or young person" (p.12).

In terms of standards of professional development as they relate to educational psychology and link to the current study, registration with the Health and Care Professions Council (HCPC) has provided an additional impetus for greater rigour in standards of conduct, performance and ethics, and for monitoring professional development. (HCPC, 2015).

2.7.6 Collaboration between professional groups

In response to a Government consultation paper on special educational needs (DfEE, 1997) Miller (1999) argued for closer collaboration between teachers and speech and language therapists (SLTs), and suggested that the creation of a framework for language difficulties would provide "a more comprehensive approach to children's spoken and written language development and difficulties…" (p. 144). Miller noted that there was a shift in the perspective of SLTs away from a medical model, with its essentially within-child explanations of language difficulties, to one which incorporated "more cognitive approaches to learning" (p. 144). Miller's argument is primarily for the role of SLTs in contributing to the curriculum; however, she comments about the importance of looking at the appropriacy of language used by teachers and demands made on children, before deciding "that a child has a speech or language difficulty, whether delay or disorder..." (p.144), thereby indicating an element of identification of such difficulties, albeit from a different perspective.

Lending further support to the role of input into the child's curriculum, Law et al. (2001) recommended that the "greater part of the provision for school-aged children [with SLCN] should be embedded within the curriculum and take the child's educational context into consideration" (p.135), and Law and Durkin (2000) assert that this can be achieved through joint working between EPs and speech and language therapists.

In 2000, the Government published a report advocating collaboration between education and health services (DfEE, 2000), at a time when there was a debate about whether language needs were an educational or a health need (AFASIC, 2001). The report focused upon the provision for children with speech and language needs, rather than the identification process, and recommended that there should be greater interagency collaboration between the Local Education Authority and Health (i.e. Speech and Language Therapy).

In a study exploring the balance between "the EP's professional identity as distinct from, but fitting in with, other professionals" (p. 111) (e.g. special educational needs, advisory

teachers, school improvement officers and mental health workers), Ashton and Roberts (2006) looked at the various aspects of the EP role, and asked which aspects were seen as valuable by special educational needs co-ordinators (SENCos). The researchers noted that SENCos valued "traditional EP roles, while EPs themselves saw a much wider range of services as valuable to schools." (p.111).

Dunsmuir, Clifford and Took (2006) undertook a study which aimed to explore the perspectives of EPs and speech and language therapists (SLTs), and identified "differences relating to professional and attitudinal issues, revealing divergent views about assessment and resources allocation." (p.125). Somewhat ironically, the researchers also noted that inter-professional "communication difficulties were also identified" (p.125). The researchers argue that a key difference is the fact that educational services provide services to all, while "some speech and language therapy services may want to focus on the more severe cases due to the pressures they are under […] and the models in which they work." (p.135). Furthermore the researchers suggest that SLTs working within a "conventional model may [not] access within-child information such as non-verbal ability if the EP [has not conducted] individual assessment of a child." (p. 135).

McConnellogue (2011) explored the area of collaboration between professional groups further, again looking at professional roles and responsibilities in joint working between EPs and SLTs, with regard to children with speech, language and communication needs. This study concluded that there was a degree of duplication of work between the two professional groups, that "communication is onerous" (p.53), and that schools were not "fully informed about children's needs." (p.53).

These studies into the collaboration between different professional groups provide a useful context for the issues which may impact upon such collaboration. However, the current study, whilst taking regard of these issues, is exploring whether there is a role for EPs in early detection of language difficulties. Reiterating Dunsmuir et al.'s assertion that educational services provide service to all, then it could be argued that the EP is in an arguably unique position to see children experiencing difficulties at an earlier stage, before referral to specific specialist services. (Dunsmuir et al. 2006).

2.7.7 Summary of prevalence rates and identification, assessment and intervention

The literature in the area of prevalence rates of language difficulties provides a solid foundation for the importance of early identification, while the consideration of the assessment

approaches currently in use serves to illustrate the unique features of the role of the educational psychologist and the specific advantages of the assessment activity applied in the current study.

2.8 THE ROLE OF THE EDUCATIONAL PSYCHOLOGIST

As previously suggested in the literature review, many researchers argue that language development is the foundation for children's cognitive development, and for most, if not almost all, aspects of their learning and social relationships. The prevalence statistics and long-term outcome data also support the value in early identification of issues in children's language development. Early identification may lead to the provision of appropriate intervention at the earliest opportunity, ensuring that each child's trajectory of learning and progress is at an optimal level for attaining maximum independence in adult life.

Jean Gross was appointed to the role of Communication Champion following recommendation by the Bercow Review. In the two years of her post she made an extensive review of national practice and identified both excellent practice and some significant and dismaying shortfalls in both practice and provision. In her 2011 report Gross provides a wide range of examples of good practice including local authorities who "strive for early identification" and achieve "a decrease in age of referral to SLT services as a result of systematic local Healthy Child Programme processes for two year olds. Equally significant has been Local Authority and NHS-funded introduction of assessment for all four year olds using systems such as Language Link, WellComm and Teaching Talking." (p.6). However, Gross also provides many examples of the shortfalls including some of the management practices in the NHS: "Routinely, speech and language therapy managers are put under pressure to manage waiting times by counting brief advice given to a parent at the time of the first contact as 'treatment'. Routinely, they are asked to reduce 'DNA' (did not arrive) rates by discharging children if an appointment is missed." (p. 8). A further example is from "a London borough where the service commissioned by the Primary Care Trust allows for speech and language therapists only to assess school-aged children, but not to provide any further intervention." (p. 8). Gross also asserts that low priority is given to children's community health services in some Primary Care Trusts. Somewhat robustly, Gross continues by stating that "[g]iven that the top-level accountabilities for performance in the NHS have had little to say about children, or about chronic rather than acute needs, this is hardly surprising. Children's needs will always struggle to compete with those of people with acute illness, and with the growing numbers of older people in need of care." (p. 8).

This report is one of the sources of data underpinning the arguments presented in this study (Gross, 2011). Even though Gross focuses primarily upon Speech and Language Therapy

and Schools, the author of the current study suggests that it is possible to extrapolate from these recommendations to the role of the educational psychologist (EP), by drawing out the key points from the report which reflect EP practice with schools, and are relevant in support of the need for developing the EP role.

For example, there is the potential role for the EP in supporting schools to enhance their practice in identifying and supporting children and young people with SLCN, whether at the individual or the systems level, e.g. curriculum, research and evaluation of interventions, classroom practice. The EP could also contribute to the recommendation by Gross for better information for parents in enhancing communication with babies and young children. A further role, and the focus of the current study, is the 'casework' level of working with individual children in exploring their profile of strengths and difficulties, whether they are referred for communication, behaviour or learning issues. Finally, the EP could contribute to multiagency working at this range of levels.

Roulstone, Wren, Bakopoulou & Lindsay (2012) published a study which is relevant to the role of the EP in the interventions for children with SLCN. The researchers interviewed EPs, SLTs and education advisory staff and, having asked about their practice and the tools used, the researchers found that local adaptations and local programme development were occurring in order to address gaps in services, and that the methods chosen by services were supported by an evidence base. These researchers' findings have prompted a subsequent national survey to examine patterns of usage of interventions.

Whilst children with overt and severe difficulties with language development will usually have been identified at an early age and referred on to Speech and Language Therapy, it has already been suggested that the EP is in a central role in considering whether language development may be an aspect of a child's learning, whether as a contributory need or even as the primary need in the child's presenting profile.

EPs have a range of methods of gathering information about a child's language development, gathering data both directly through individual work or observation of a child, and indirectly by scrutinising information gathered by others working with the child. For direct assessment the materials available to EPs can be both formal and informal, and may or may not be standardised to compare the child's stage of skill acquisition to that of their peers. Two widely-used cognitive assessment batteries are the Wechsler Intelligence Scale for Children (WISC-IV) (Wechsler, 2004) and the British Ability Scales (BAS-3, 2011): these are designed to explore a child's cognitive profile and each has language subtests which combine with other items to derive a score as part of a broader cognitive profile for a child. However, the publisher

of the WISC-IV notes the applications of this assessment in the Administration and Scoring Manual: "… the WISC-IV can be used to obtain a comprehensive assessment of general cognitive functioning […and …] as part of an assessment to identify intellectual giftedness, learning difficulties, and cognitive strengths and weaknesses." (Manual p.6). As such, it is not designed specifically as a stand-alone assessment of language skills. Furthermore, it is a formal and time-consuming process, arguably more appropriate if concerns have already been recognised, while the author of the current study argues for the need for a triage tool which is simple to use, informal, and yet has sufficient predictability to attempt to identify initial indicators of potential issues with a child's language development, even when the child's primary referral question may not reflect any language issues.

Various other assessment tools used with children are more detailed in their design and generally focus upon individual sub-skills, or a combination of the sub-skills, and a wide range of other assessments is available which are not restricted to psychologists alone. These include the Clinical Evaluation of Language Fundamentals (CELF) (Semel, Wiig, & Secord, 2003), the British Picture Vocabulary Scale (BPVS, n.d.) for receptive language, and the Bus Story for expressive language (Renfrew, 1969). It is suggested that, for the early stage of an EP meeting and getting to know a child, the assessments described above could be, with varying degrees, intensive, time-consuming and intrusive.

Of course the need for the EP to have background knowledge of language and its development is central to the use of this approach. However, if the EP then can apply this knowledge through the use of a typical activity such as looking at a book with a child, then the informality of this activity, which is supported by a degree of structure, makes an initial exploration of narrative skills in a real-time narration a potentially fruitful and efficient source of information. The combination of the knowledge and the use of the activity could enhance the EPs' confidence in making an initial exploration of language issues. The current study seeks to achieve this aim, and the detail will be described in Chapter 3.

2.9 SUMMARY OF LITERATURE REVIEW

The literature review has set a theoretical and research context to the current study by:

- Considering psychological theories of change and continuous improvement and their relationship to professional development.
- Providing a summary of theoretical approaches to typical language development.
- Illustrating the importance of early identification of language difficulties through the research on prevalence rates of difficulties and long term outcomes.

- Highlighting the pressure on other services.
- Summarising the range of Government initiatives to support language development and presenting a summary of current approaches to assessment of language.
- Clarifying the nature of the role of EP as additional to, and not a substitute for any other professional group.
- Identifying potential gaps in both the research and in the assessment approaches.
- Providing a research basis for the relevance of the current study in addressing a potential opportunity in EP practice to enhance the outcomes for children and young people.

The research questions designed to explore the area follow, and the method by which the current study was conducted is explained in Chapter 3.

2.10 THE RESEARCH QUESTIONS

The aim of the current study is to explore the role of the educational psychologist in the assessment of children's language. The literature review has provided the research background and basis, and the study seeks to answer the following research questions:

RQ 1a.	*What are EPs' perceptions of, confidence in, and approach to exploring children's language development and its assessment?*
RQ 1b.	*Does the EPs' confidence in this area reflect their length of service?*
Source	Data (A): : EPS whole-service questionnaire survey [N]=20 Data (B: pre-) Participant EPs' self-rating in initial interview [N]=9 Data (B: pre-) Participant EPs' responses in initial interview [N]=9

RQ 2a.	*Does EPs' confidence in assessing children's language change following a training session in language difficulties and the use of a specific assessment?*
RQ 2b.	*Does any **change** in the EPs' confidence in this area reflect their length of service?*
Source	Data (B: pre-) Participant EPs' self-rating in initial interview [N]=9 Data (B: pre-) Participant EPs' initial interview [N]=9 Data (B: post-)Participant EPs' self-rating in follow-up interview [N]=8* Data (B: post-)Participant EPs' follow-up interview [N]=8*

RQ 3a.	*Is a training session in language difficulties and using the specific assessment useful to the EPs in their practice?*
RQ 3b.	*Has the training session in language difficulties and using the assessment changed how the EPs will subsequently assess language?*
Source	Data (B: post-)Participant EPs' follow-up interview [N]=8** Data (C): Comments from the group discussion

CHAPTER 3 ~ RESEARCH DESIGN

3.1 INTRODUCTION AND VISUAL MAP

Having reviewed the literature to provide the relevant contemporary background to the research questions in the current study, this chapter describes the research process designed to explore these questions, and focuses on the following areas:

Ontology & epistemology underpinning the study	• *Discussion of the range of perspectives to conducting research*
Research methodology a mixed methods design	• *Arguments leading to the selection of a mixed methods research design*
Method	• *Context* • *Chronology* • *Stages of the study* • *Ethical issues* • *Piloting the study* • *Sampling* • *Participants* • *Data collection - questionnaire* • *Data collection -semi-structured interviews* • *Training session for participants* • *Rationale for choice of assessment activity* • *Principles for administration of assessment activity* • *End of study group discussion* • *Debriefing process*
Data collection & analysis	• *Overview of data and analysis* • *Data collection methods:* *- questionnaire* *- semi-structured interviews* *- end of study group discussion* • *Data Analysis:* *- questionnaire* *- semi-structured interviews* *- end of study group discussion* *- thematic analysis of interviews*

3.2 ONTOLOGY AND EPISTEMOLOGY UNDERPINNING THE CURRENT STUDY

Grix (2002) asserts that the researcher must understand the relationships of the "ontological and epistemological assumptions" that underpin research for the following reasons:

- To understand the interrelationship of the key components of research, including methodology and methods.
- To avoid confusion when discussing theoretical debates and approaches to social phenomena.
- To be able to recognise others' and to defend personal opinions (p. 176).

Grix asserts that there are four 'building blocks' of research, while Arthur, Waring, Coe & Hedges (2012) explain that these four areas generate four key questions with the clear advice that they be addressed in sequence:

> **Ontology**: What is the form and nature of the social world?
>
> **Epistemology**: How can what is assumed to exist be known?
>
> **Methodology**: What procedure or logic should be followed?
>
> **Methods**: What techniques of data collection should be used? (p.16)

Arthur et al. (2012) continue by advising that an understanding of the relationships between these four areas will inform the choice of research design, primarily whether qualitative or quantitative. Ontology and the ontological perspective is fundamental to the design of a research study, and Arthur et al. argue that the assumptions therein "form the starting point for all research" (p.16). These authors illustrate the extremes of ontological positions by describing them as existing in "simplistic fashion along a continuum from left to right from realism to constructivism" (p.16). At the realism end of the dimension, the authors argue that there is an objective reality which can be discovered if the right approach is taken to search for it. At the opposite end is the view that there is no objective reality, but there are multiple realities, each constructed by individuals.

The epistemological position underpinning a study rests upon the ontological perspective adopted by the researcher. Carter and Little (2007) argue the importance of the epistemological position taken by a researcher, as it influences decisions about methodology and, consequently, the choice of research methods.

Extending their analogy of a dimension, Arthur et al. (2012) assert that the epistemological position equating to realism would be positivism and the corresponding position to constructivism would be interpretivism. Willig (2008) explains that positivism is founded on a belief in fundamental laws and truths in the social as well as in the natural world, while Burr (2003) argues that the interpretivist perspective supports the view of multiple realities as people interact and engage in the process of interpretation. Following this argument, Robson (2011) summarises the dichotomy: positivist researchers seek objectivity through attempts to discover empirical regularities and universal causal laws, while interpretivists seek multiple perspectives, incorporating the view that research participants are part of a social process, thereby contributing to a shared construct of reality (Robson, 2011).

Critical realism can be regarded as offering an approach which can reconcile the two opposing dimensions, combining them into a legitimate research approach. Pawson and Tilley (2008) assert that a basic tenet of critical realism is that objective reality does exist, whilst also noting that this reality is interpreted through the individual belief systems of the participants within the study. Archer, Bhaskar, Collier, Lawson & Norrie (1998) argue that critical realism forges a third way, where the contradictions are reconciled through the view that knowledge is a social product of those producing it, yet that knowledge may exist independently of those seeking to understand it. Other authors in support of critical realism argue for the reality of mental concepts and processes, as opposed to their being constructions originating within the observer (Sayer, 2000), going on to conclude that these mental concepts and processes can be essential elements in seeking an explanation for a social phenomenon (Maxwell, 2004).

De Vaus (2001) argues that the research design will be the mechanism by which the evidence is obtained and so it should ensure that the researcher can answer the question(s) as "unambiguously as possible" (p.9). Bryman (2006) notes the potential for influence if the connection between theory and research is not fully understood, whilst simultaneously highlighting the epistemological and ontological considerations as being factors which contribute to the importance of selecting the appropriate research design, and understanding the difference between the differing research approaches. Furthermore, there is an open-endedness, diversity and potential absence of boundaries to the studied situation, and Hammersley (1993) advises caution in identifying only difference, arguing that researchers should be as aware of similarities as they are of differences, with an additional factor potentially being familiarity with the situation. The focus upon the immediate social context can, somewhat paradoxically, also result in a study which neglects the wider social context beyond that of the study.

Forrester (2010) asserts that, in a quest to understand reality, critical realism can accept the cultural and historic specificity of knowledge, and therefore the understanding of knowledge must take place within the context of the study and its individual and societal beliefs and values.

3.3 RESEARCH METHODOLOGY: A MIXED METHODS APPROACH

Methodology is a reflection of the ontological and epistemological assumptions, and methodological approaches are the route to the selection of which procedures or logic should be followed (Arthur et al., 2012). The preferred epistemological position for the current study is critical realism, as Sayer argues that critical realism combines ontological realism with epistemological constructivism (Sayer, 2000).

Based upon the critical realism epistemological position, the current study is one employing a mixed methods design involving two different theoretical approaches: a quantitative survey and qualitative interpretive interviews. Robson (2011) argues that research in the real world does not equate to rigorous scientific or academic research, and cautions the researcher to be aware that the social sciences "have a substantive content of philosophical underpinning, theories, models and findings" (p.9) which needs to be taken into account. Robson continues by arguing that the priorities for the real world researcher differ from those adopting a more traditional academic model.

The mixed methods approach is intended to combine the systematic and rigorous application of the skills involved in scientific research, including "observing, and interviewing, designing, analysing, interpreting and reporting" (Robson, 2011,p.9) with the need for flexibility and pragmatism. Robson argues that the goal of the design is that, by introducing rigour, a well-constructed flexible research design which is based upon qualitative data (e.g. accounts from other people) can "achieve a justified believability and trustworthiness" (p.9). Robson further argues for a range of differences between the real world and the academic researcher, with one dichotomy being that the academic researcher wishes to gain knowledge to advance their discipline, while the real world researcher has an interest in solving problems.

Robson (2011) asserts that the quantitative element of research is founded upon quantification by converting the data into numbers in the pursuit of accuracy and precision, seeking objectivity, and requiring deductive logic to explore existing theories or concepts. In contrast, a qualitative approach is based in non-numerical, often verbal, data derived from, for example, interviews. This approach has a focus upon meanings and contexts for the observations made, and takes place in natural settings. The approach values the social world as

being the construct of those working within it, and inductive logic is applied to draw out the meanings and themes. There is no objective reality, but an interpretation of a reality if created through the thematic analysis of the data. Replicability is a fundamental element of quantitative research, whereas qualitative research requires a flexibility and pragmatism to respond to each individual situation, thereby reducing the capacity to replicate the work with precision.

The mixed methods design is an approach to balance the strengths of both the qualitative and the quantitative, without losing the context and social process of the individuals' construction of their own reality.

Robson (2011) argues that the purpose of research is to "explore, to explain, or to describe" (p.39), and argues that the use of the pragmatic approach to research "provides one way of justifying bringing together qualitative and quantitative approaches" (p.30), asserting that this could be considered as being a realist approach to research. Manicas (1987) posits that realism is well-established in the philosophy of science, whereas Robson writes that the 'new' realism is presented in a number of guises, one of which, most relevant to the current study, is 'critical realism'.

3.4 METHOD

3.4.1 Context of the study

The current study was conducted with members of a County-wide Local Authority Educational Psychology Service, in the midst of the 2011-2012 first round of major national Local Government budget reforms. The general atmosphere at that time was one of uncertainty across the whole service, including issues of whether the EPS would need to become a traded service, whether the EPS would survive these changes, and whether there would be employment for individual EPs. Furthermore, a major office move to different office accommodation was placing a further strain on the EPS.

3.4.2 Chronology of the study

Table 4. Chronology of the current study

Activity	**Date** (approx.)	**Appendix**
Thesis Proposal submitted to the University Ethics Committee including supporting information and additional information	March 2011	**A**
Thesis Proposal approved by the University Ethics Committee	April 2011	
Letter to PEP explaining purpose of study and requesting permission to recruit participants	May 2011	**C**
Piloting, distribution and completion of EPS questionnaire survey	May 2011	**J**
Review of responses to questionnaire to inform interview schedule	May 2011	
Piloting of participant initial (pre-) interview schedule	May 2011	
Initial email request to colleague EPs inviting participation	May 2011	**D**
Initial group meeting and training session with participant EPs	June 2011	**I**
Initial (pre-) interviews with participant EPs	June & July 2011	**K**
Transcription of initial interviews	July & Aug 2011	**N**
Three terms for application of the Frog Story assessment activity through generic casework	Academic year 2011-2012	
Follow-up (post-) interviews conducted	July 2012	**L**
Final group discussion conducted	July 2012	**M**
Transcription of follow-up interviews	Autumn-Winter 2012-2013	**e-file submitted**
Completion of write-up	2013-2014	

3.4.3 Detailed stages of the study

3.4.3.1 Thesis proposal, supporting and additional information (Appendix A)

All paperwork associated with the University's Thesis Proposal can be found in the Appendices.

3.4.3.2 Letter to the Principal Educational Psychologist (PEP) (Appendix C)

In parallel to the process of Thesis Proposal and submission, the study was discussed with the PEP to ensure that it was judged to be appropriate and relevant to the Educational Psychology Service (EPS).

3.4.3.3 Piloting, distribution and completion of EPS questionnaire survey (Appendix J)

The questionnaire was piloted both with a colleague EP, and with a non-EP who was familiar with the process of questionnaire development: a number of changes were made to address various issues including readability and potential ambiguity.

3.4.3.4 Piloting of participant initial (pre-) interview schedule

The initial semi-structured interview was piloted with a colleague EP who was an experienced researcher and a number of changes were made.

3.4.3.5 Initial email request to colleague EPs for volunteers to participate (Appendix D)

The request was made by email as the EPS is widely-distributed across a large county.

3.4.3.6 Initial group meeting and training session with participant EPs (Appendix I)

The initial meeting with the participant EPs provided sufficient information and detail to ensure that their agreement to participate was fully informed. See section 3.4.9.

3.4.3.7 Initial (pre-) interviews (Appendix K)

For this stage of the study up to two hours was allocated for each individual interview between researcher and participant EP to: ensure there was full understanding of the implications of involvement; clarify any areas of uncertainty or concern; sign the participant consent form; and to conduct the individual initial interview. Notes were taken throughout the interview, but each interview was also audio-recorded (with the full agreement of the participant EPs) as the note-taking process inhibits the flow of discussion and selection of follow-up questions.

3.4.3.8 Transcription of initial interviews

Transcription of each of the nine interviews was used as a basis for refinement of the follow-up interview

3.4.3.9 Follow-up (post-) interviews (Appendix L)

A further one to two hours was allocated for the follow-up interview between researcher and each of the participants, and these interviews were again audio recorded as well as brief notes made at the time. Following the close of the interview the de-brief sheet was provided and there was opportunity for further discussion of issues arising if the participant so wished. Participants were thanked for their assistance, involvement and commitment to the study.

3.4.3.10 Final group discussion (Appendix M)

After the completion of the follow-up interview process, a group discussion was arranged for the participants, to share the experiences of their involvement with the study. A brief outline was of the topics to discuss was provided by the researcher, and handwritten notes only were taken at the time of this meeting. The data generated have contributed to the thematic analysis of the interview data. Further thanks were given to colleagues for their insights and comments.

3.4.4 Ethical issues

The British Psychological Society Code of Ethics and Conduct (2009) provides guidelines for professional psychological practice based upon four key principles: respect, competence, responsibility, and integrity. Each ethical principle is "described in a statement of values, reflecting the fundamental beliefs that guide ethical reasoning, decision making and behaviour" (p.9), which are then individually further defined by a set of standards. The most relevant aspects of this extensive code have been selected on the basis of having taken full account of the complete code, and ensuring that those areas selected are relevant to, and reflect the current study. In the following detail of the methods used within the study, these sections are included where they are most pertinent.

3.4.5 Piloting the study

The initial phase of the research explored the viability of the early plans with an opportunity sample of colleagues who were both willing and available for a general discussion on this topic. This stage started with the piloting of a first draft questionnaire and ended with a complete reframing of the approach; however the exploration of the area of EP confidence in children's language development remained intact.

The questionnaire was informally piloted by using an external EP reader to view it critically "as if" a respondent, and to comment on any ambiguities, uncertainties, or flaws in the logic of the items presented.

One colleague piloted the whole-service questionnaire and two further colleagues reviewed the contents of the pre- and post- interviews with the researcher.

3.4.6 Sampling

Robson (2011) explains that the process of sampling impacts upon the extent to which the findings of the study can be generalised to the wider population. However, as the research design selected is qualitative and therefore based in increasing understanding of a "real-life" context, the need for the sample to be statistically representative is diminished, to the point of irrelevance.

The sample was an opportunity one, available by nature of the researcher's employment within a Local Authority Educational Psychology Service.

3.4.7 Participants - adults

The participants were colleague EPs in a large County Educational Psychology Service (EPS) and both the researcher and all the contributors were employed within the Local Authority in a professional Educational Psychology Service.

BPS para 1.4 Standards of self-determination

For the participants the time commitment relates to the initial and final interview, the training session in the specific assessment approach, the group discussion and de-brief. However, the specific assessment activity does not require any additional time commitment or work, other than the administration of the task. All materials were provided by the researcher.

BPS para 3.3 Standard of protection of research participants - Responsibility

A caution provided by Cohen, Manion and Morrison (2007), is to consider the specific ownership of the data. The general data in terms of overview and outcomes will enter the public professional sphere, both within the group discussions and through the completion of the account of the current study. The individual opinions of the participant EPs will remain entirely confidential to the researcher and all recordings and handwritten notes will be kept indefinitely (updated guidelines provided by Examiners but not in place at the time of the data collection for this study).

3.4.8 Participants - children

The children with whom the EPs were working as part of their generic casework provided the basis for the EPs to apply their knowledge of language and use the Frog Story assessment activity.

BPS para 1.2 Standard of privacy and confidentiality

The specific assessment activity is one of a child retelling a story from an illustrated book without text: this has been selected as being typical of an activity an EP might conduct when

working with a child, and it does not require colleagues to administer anything unusual or beyond their typical daily practice. The children involved in the study are those with whom the EP would be working as part of their typical caseload. In terms of ethical issues for the children involved, the assessment activity falls within the scope of general EP practice and does not manipulate or deceive the individual child in any way. The materials used are published illustrated books with no text: these are age-appropriate, and have been selected to enhance the rapport-building and relationship between the child and the EP as they provide a natural and relaxed activity to share. Appropriate permissions have been sought from the publishers.

3.4.9 Information provided to the prospective participant EPs

The whole Educational Psychology Service was given a brief verbal outline of the initial phase of the study being an exploration of EPs' views on, and knowledge about children's language development. The participant EPs in the second phase of the study were provided with an initial information sheet outlining the broad area of the study and the potential requirements for collaboration, a range of information sheets summarising the contents of the training session, and a pack containing the Frog Story book with its related record forms.

BPS para 1.3 Informed consent

In terms of informed consent for the participant EPs, there was an information sheet provided at the outset, with full detail about the interview and the researcher's commitments to the confidentiality and security of the recordings and how they will be managed. There is also an opt-out for anyone who subsequently would prefer, upon reflection, that their views not be included. In such a case, if the researcher is informed at any time during the study the recording would be deleted immediately.

However, once the EP is familiar with the activity to be carried out with an individual child s/he may feel that this raises a number of issues for the way s/he would work with an individual child. For example, s/he may consider that the research activity will substantially extend their time with a child, or that it would replace an activity s/he would have preferred to undertake with the child. If s/he were concerned that the current research activity would prevent them from undertaking their own preferred activities, then the EPs will be assured that their own practice must take precedence, and the current study activity should not be used. In the event that the EP may consider that the current research study activity substantially alters the session with an individual child in any way, s/he should either suspend the activity or obtain the verbal consent of the child and provide the child's parent with the choice of opting out of this activity if that is the parent's wish.

3.4.10 Quantitative data - the questionnaire

The use of the questionnaire as a data collection tool opens up an extensive list of cautions and caveats, and the design and application of the questionnaire format in this part of the study has attempted to take full account of these. According to Cohen, Manion and Morrison (2007), the overriding issue for questionnaire design is the ethical dimension: the potential for intrusion, time taken to complete, the level of sensitivity of the questions and the risk of invasion of privacy. To address these features the questionnaire was designed to facilitate brief responses of extent of agreement with a range of statements, by circling the response to ensure anonymity. Comments could be added if the individual EP so wished, but there was no clear request for these, and the questionnaire was administered during an Educational Psychology Service meeting to address the time element.

BPS para 1.2 Standard of privacy and confidentiality - Respect

Issues of respect, privacy and confidentiality in relation to the whole-service questionnaire, should largely be addressed through the administration of this instrument during an EP Service meeting, with the responses to be made anonymously. There is a possibility that EPs could feel coerced into completing it, since the group nature of its administration is intended to ensure that time is allocated, whilst also making the completion of the questionnaire more of a public act; the instructions at the outset will reassure colleagues that whether or not to complete it, and whether or not to provide any written examples which may indicate who the individual EP is, is a matter of choice.

At the outset of the study the initial questionnaire was administered anonymously to the whole EP service, and respondents were assured that they could omit any questions should they so wish. For the EPs (the 'participant EPs') who agreed to be part of the subsequent and more focused element of the study, they were invited to comment upon fundamental elements of their professional practice and, potentially, could be sharing any concerns they may have about this aspect of their work. The main route for potential identification was through their length of service. In order to safeguard anonymity their data are presented by grouping length of service into three blocks: 0-5 years, 6-10 years, and 11 years and over. The participant EPs were provided with clear written assurances of the confidentiality of all their data, the manner in which data will be anonymised and stored, and the uses to which the resultant data will be put.

The items were designed to be closed statements requiring the respondent's degree of agreement/disagreement recorded against a six-point Likert scale - one where there is no assumption of regular intervals between the points on the scale. The advantages are that the Likert scale makes it possible to summarise the nominal data in a numerical manner, albeit non-

statistically, and "… [the scales] afford the researcher the freedom to fuse measurement with opinion, quantity and quality." (p. 327). (Cohen et al. 2007). However, cautions in its use relate to: the lack of capacity to verify the responses, the absence of opportunity for the respondent to add further comments, the likelihood that it is less likely that people will choose the extreme ends of the scale, and that there is a tendency for respondents to opt for the mid-point; to address this final point a 6-point scale was used in this study. There is also the potential for researcher influence in the items chosen since, by their very nature, they are exploring an area which has been generated by the researcher, and questions should be scrutinised for bias.

The questionnaire has four different types of possible response, depending upon the semantic requirements of the question. Caution was exercised in the use of verbal labels for the 6 points. Mastrandrea et al. (2010) produced guidance notes to ensure that authors writing in this field are using a harmonised set of terms. In a list of guidance principles in dealing with uncertainty, one factor Mastrandrea et al. highlight is that 'the way a statement is framed will have an effect on how it is interpreted'. (p.2). The author of the current study argues that these principles are appropriate to use of language in other fields, and their views have guided the categories selected for the questionnaire.

When the question permits a response which relates to the likelihood of the EP doing something, the choices are given verbal labels for the EPs to circle the relevant term:

Please circle …					
Definitely	**Probably**	**Possibly**	**Possibly not**	**Probably not**	**Definitely not**
6	**5**	**4**	**3**	**2**	**1**

However, verbal labels were judged not appropriate for EPs to record the measure of their confidence, and a 6-point scale will be used, where the EP circles the appropriate number:

Please circle …					
Extremely Confident		→			**Not at all confident**
6	**5**	**4**	**3**	**2**	**1**

The third type of response is:

	Please circle …		
Q4.	**Yes mainly**	**Yes partly**	**No not at all**

The fourth type of response is:

	Please circle …	
Q8.	**Yes**	**No**

Finally, the EPs were asked to circle bands of years' experience, to gather some data relating to experience, whilst also sustaining anonymity.

In training	1-5 years	6-10 years	11-15 years	16-20 years	21-25 years	25+ years

The 8-item questionnaire has been designed to ensure that the maximum number of EPs' views would be represented: it was brief and concise in its administration, with dedicated time during an EP Service meeting to facilitate completion and return. The colleagues' responses were sought anonymously, as it is intended to gain a whole-service picture, rather than to explore any one individual's views. It was also considered that, if no name were required, it would be more likely to gain a true representation of views and possible concerns. The response was on a six-point scale to avoid the middle line being taken.

3.4.11 Qualitative data - the semi-structured interviews

Critical realism recognises that research methods cannot be truly objective and authors in the field explain the advantages of the semi-structured interview approach, including: that interviews are flexible and able to permit exploration of the participant's own perspective (Bryman, 2004), that the order of presentation of the items and issues covered by the interview can be flexible in response to the flow of the interview (Denscombe, 2003), and that the open-ended nature of the questions allows the interviewee to digress, permitting the interviewer to explore specific areas in greater depth (Britten, 1995). Robson (2011) argues for the capacity of semi-structured interviews to create a possibility for exploration of underlying motives and beliefs.

However, these advantages are tempered by a number of issues or cautions, with authors suggesting that: the interview responses will most probably be unpredictable, requiring the interviewer to be well-prepared prior to the session and possess a level of skill in eliciting information from others in this way. Furthermore, time is required (and specific methodology) to distil the key features of the information provided in a manner which will be meaningful for the research study (Wengraf, 2001). Gillham (2005) notes that the techniques required during such an interview are considered to be: probing for further information, requesting clarification, asking for examples and reflecting the interviewee's responses. However, it could also be argued that these all appear to be core features of the EP professional role, thereby strengthening the choice to use the interview as a data collection method. It should also be noted that Charmaz (2006) suggests that the interviewees may "recite public relations rhetoric, rather than reveal personal views, much less a full account of their experiences" (p.27).

3.4.12 Training session for the participant EPs

The participants had varying degrees of experience of children's language difficulties, therefore an introductory information and training session was provided to ensure that the participants had at least a similar baseline level of understanding of this area of children's development. This session was designed to raise the EPs' awareness of these elements in a more structured manner, rather than to assume that EPs were not aware of these elements.

The model of language used in the training session was based upon the Bloom and Lahey (1978) model of the constituent elements of language being Form, Content and Use, as the researcher argues that this model is most relevant to language in the educational setting. Referring back to this model, the Form element is the structure and grammar of language, and this is demonstrated by word order, word endings and verb tenses, all of which are combined to create a grammatical sentence. A child's skill in this area would be the main focus of the assessment. However, during the session the other two elements were also highlighted as being possible areas for the assessing EP to be aware of: Content being the use of vocabulary and concepts, and relying on the capacity to understand the meanings of the words in order to convey the correct message**,** and the Use being the pragmatic aspect of language.

The training on language also provided the participants with a process of formalising the observations made on a child's language, using Total Number of Words and Number of Different Words, if they wished to do this. See also Appendix I for full details of the content of the training and information provided to participants.

3.4.13 Rationale for the choice of the assessment activity

In order to support the participants in their exploration of children's language development, a task involving a child's narrative ability was also introduced in the training session. The research evidence for the use of the activity provides a clear rationale for its selection for the current study. Furthermore, Botting's view of the importance of narrative ability as being one of the most ecologically valid ways to measure communicative competence, lends support to the choice of assessment activity (Botting, 2002).

Tomlin (2004) explored a real-life language task through his FishFilm studies, using a real time narration task to look at a subject's oral language. Dollaghan, Campbell and Tomlin (1990) assert that the use of a standard stimulus, in this case the video narration task, serves to reduce variability either among different speakers or with samples from the same speaker which are taken over time, thereby arguing that this supports a greater consistency than would be found in the analysis of a conversational sample, or from a diverse range of stimulus materials.

It is possible that the time commitment and requirement for specialist equipment in video narration assessment renders it impractical in everyday EP practice. The use of a book to support the narration task is more simple and reduces the time involved, whilst also attempting to reduce variability in its application across a number of children, or in cases of repeating the activity with the same child. The books chosen for the current study as the stimulus for EPs to elicit language samples are the Frog Story stories; this is a series which has been used by academic researchers in range of studies. The assessment activity is intended as a brief and initial screen of a child's language development and originates from an Tomlin's study of video narration (Tomlin 2004).

The Frog Story series of books (Mayer, 1969, 1974) are illustrated and have no accompanying text. Slobin (1996) used one of the Frog Story series (*Frog Where are You?*) as a stimulus to investigate the relationship between concepts and language; Norbury & Bishop (2003) also used *Frog Where are You?* to elicit the narratives from the group of children with specific language impairments (SLI), to examine their narrative skills. Bishop explains that the Frog Story book had already been used "extensively in researching narratives produced by typically developing children (Bamburg & Damrad-Frye, 1991, Berman & Slobin, 1994), children with SLI (Van der Lely 1997, Botting, 2002) as well as in children with neurodevelopmental disorders (Reilly, Losh, Bellugi, & Wulfeck, 2004)" (p.295).

The Frog Story approach has some parallels with Renfrew's Bus Story Test, (Renfrew, 1969) which is a test of continuous speech. Describing the analytical process from a language development perspective, Renfrew provides a normative model, where "the age level of consecutive speech used in retelling a story can be assessed from the information content, sentence length and grammatical usage of this test" (p.24).

As discussed previously, the selection of this series of books was intended to provide EPs with a simple and informal task as an initial screen to determine whether there may be issues of language in a child's presenting profile. It is a very natural and typical activity to conduct with a child, and less intrusive than a more formal assessment tool.

It was recognised that the Frog Story activity would only be appropriate for younger children: Key Stage 1 and the lower end of Key Stage 2 being judged the most likely age group, although creative application of the task might have made it appropriate for a much younger child. In order to provide the participant EPs with an additional activity with a similar purpose, but for older children, a parallel principle was applied to samples from the Where's Wally books (Handford, 1987). The intention was to provide a double page spread from one of the Wally books for the child (young person) to create the "best story that you can" from the vast detail

within the illustrations; the amount of prompting or scaffolding required for this to be a successful task was left to the individual EP's judgement. As the study progressed, it was clear that there were very few occasions when this was an appropriate activity to use, although those colleagues who did use it said that it provided a good basis for work with a young person, though the activity needed further discussion and modification. Insufficient data were generated to be included in this study, but this might then be explored in a future study.

3.4.14 Principles for the administration of the assessment activity

The focus of the current study was to explore the confidence of EPs in the area of children's language development. As the participants were all professional EPs, or soon to be qualified, the advice on using the Frog Story assessment activity was intentionally general. This was to acknowledge the participants' own professionalism and experience in working with children, and for the study not to be diverted into providing unnecessary rigidity by giving specific and precise instructions for the delivery of the task. The advice was to use the activity flexibly, much as they would use a child's own reading or library book, and to modify the instructions and level of support provided to the child in the way that EPs actively explore a child's strengths and weaknesses. In this manner, the EPs would be using the assessment activity dynamically, based upon their own judgement.

3.4.15 The end of study group discussion

The inclusion of an additional group discussion at the end of the study was intended to fulfil a number of purposes, based upon the research as highlighted in the literature review. For example DuFour (2004) argues that the sharing of the learners' experience is what contributes to and creates a "learning community" (p.6), with Main's associated "culture of enquiry" (1983, as cited in Lees, 2004, p.12). Earl and Katz (2002) stress that "making sense out of data and ruminating about how it contributes to deeper or clearer understanding in a group, brings a great deal into focus" (page 1020). These authors assert that the group dimension of this process results in the learners' knowledge being made public, thereby enriching colleagues' understanding through benefiting from the range of critical perspectives on the topic.

In addition, Guskey (2002) argued that it is not the professional development *per se* which is the positive factor, but the change that comes as a result of the teachers' own observations of the impact upon students. In a broad parallel to Guskey's conclusions, the group discussion gave EPs the opportunity to explore the impact of their change in practice on the children and staff with whom they were working, thereby creating additional enhancement to their professional development.

Furthermore, the discussion forum provided an opportunity to share views and gain the maximum information from the wide range of colleagues' experience from participating in the study, as well as creating a 'closing' activity to the year-long commitment. It is argued by the researcher that it is a point for debate whether this group discussion should preferably have occurred prior to the final interview with the researcher, thereby ensuring that the final self-report of confidence included all elements of the Professional Development process. However, access to the EPs at a time when all were available made this not possible.

3.4.16 Debriefing process

BPS para 3.4 Standard of debriefing research participants - Debriefing adheres to the University's ethics guidelines, and was offered at the end of the second interview, with the purpose behind the study being explained: debriefing after the initial interview would alert the EPs to the precise focus of the study (i.e. their confidence in this area of professional practice) thereby introducing an unnecessary variable. Further reassurance was given about anonymity and security of data storage as well as a reminder of the option to withdraw at this stage, before the data are anonymised**.** (Appendix G).

A further debrief and sharing of the findings was offered following the analysis of the data and completion of the project, including involving the whole Educational Psychology Service team.

Having explained the rationale for the choice of methodology and research methods, the following sections will give details of the process of data gathering and analysis across all phases of the study.

3.5 DATA COLLECTION

3.5.1 Overview of the data collection and analysis

Table 5. Data sets, methods for generating data and numbers of contributors

Phase of study	Title of data set	Contributors [N] =	Analysis & presentation of data
Phase I	**Data (A):** Whole-service questionnaire survey	20 out of 25 EPs from the whole EPS **[20]**	**Excel program to create tables & figures**
Phase II	**Data (B: pre-)** Initial interview with researcher **Data (B: pre-)** EP's self-rating during initial interview with researcher	Participant EPs (subset of the whole EPS) **[9]**	**Thematic analysis Schematic diagram** **Table of themes and sub-themes** **Table**
Phase III	**No data**		
Phase IV	**Data (B: post-)** Follow-up individual interview with researcher **Data (B: post-)** EP's self-rating during follow-up interview with researcher	Participant EPs **[8]**	**Thematic analysis Table of themes and sub-themes** **Table**
Phase V	**Data (C)** Group discussion	Participant EPs **[8]**	**Included within analysis & presentation of pre- and post- interview themes**

3.5.2 Introduction

Data generated in the current study are both quantitative (questionnaire data) and qualitative (interview data). The quantitative data generated by the questionnaire survey were summarised in an Excel spreadsheet, explored for any initial correlations through the Excel program, and are presented in simple graphical and tabular form to summarise the views across the whole Educational Psychology Service in Chapter 4 ~ Results and Findings.

3.5.3 The questionnaire

The data collection occurred in four main stages, with two overlapping groups of EPs, as follows:

Phase I: An EPS whole-service questionnaire: [N]=20 (Data (A): Appendix J.

A questionnaire was administered to the whole EPS providing a 'snapshot" of their views on assessment of language development. This questionnaire was completed by 20 (out of 25) comprising 16 women and 4 men, with an EP experience range from Assistant Psychologist to 27 years, of whom:

- 2 were Assistant EPs
- 3 were Trainee EPs
- 11 were maingrade or specialist EPs, and
- 4 were Senior or Principal grade EP

The questionnaire provided a six-point response scale to avoid a series of responses 'down the middle'. Other than the Yes/No items, all responses were made on this six-point scale, but the style of presentation of the scale varied with the semantic demands of the question, as explained in Chapter 3 Research Design. For example, in the question *Is language a major factor to explore*…? the scoring gave six levels of certainty of EP view. However, when the response was an individual judgement, for example in the question How confident are you that you know typical language development? the gradations did not lend themselves to helpful intermediate labels, and a six-point scale was used instead.

The questionnaire items were designed to generate anonymous responses with no opportunity for EPs to add comments to qualify these responses; hence the data are based solely on numbers of responses in different categories. The use of the 6 point scale would suggest that the responses would broadly follow a normal distribution curve; however, this has not been the case, and individual patterns and trends are discussed.

Finally, the respondents are all styled as EPs for ease of reading throughout this chapter. However, it should be noted that 5 of the 20 respondents to the Questionnaire were not fully qualified and are styled 'EPs in training' wherever the distinction is pertinent to the data, being a mix of Assistant Psychologists and Year 2 or 3 EPs in Training or on placement. This led to a need during scoring to differentiate, whenever possible, between qualified and un-qualified EPs, as this impacted differentially upon some items. For the items which the EPs in Training were not able to use, they were instructed to mark No rather than leave the item blank: the intention was to harmonise the data and for the reader to be aware of the occasions when the unqualified

'EPs' had responses embedded within the results, rather than providing percentages which would sometimes reflect [N]=20 and sometimes [N]=15. The researcher chose this method as a balance rather than an ideal, with the impact of harmonised visual presentation of the data trends superseding the level of precision in the individual percentage calculations.

The anonymity of the respondents was judged to be the most important factor in this initial stage of data gathering, resulting in an absence of additional qualifying EP comments in the questionnaire. However, where comments in the individual EP interviews are relevant to the question of confidence in language development, they have been included.

3.5.4 The semi-structured interviews

3.5.4.1 Phase II: The initial (pre-) interview : [N]=9 (Data B: pre-) Appendix K.

An initial interview (pre-) was conducted between the researcher and each of the 9 EPs from the whole service who were both willing and had the capacity to participate. These EPs are termed *participant EPs*. The group of 9 participant EPs comprised:

- a range of experience from Year 3 EP in training, to an EP with 27 years' experience
- 7 women and 2 men
- background of attending a number of different EP training courses (Birmingham, Cardiff, Nottingham, UCL and the Tavistock)
- 8 maingrade EPs with a range of specific individual specialisms, and one a Senior EP
- ages ranging from early thirties to fifties
- for the follow-up there were 8 EPs with one EP being on extended leave at that time

A total of 9 (originally 10 but one withdrew for health reasons) EPs volunteered for the second part of the study, which involved individual interviews both before and after, as well as attending a training session and using a specific assessment activity. Although the Service has just over 20 EPs, a number of whom are part-time, the available 'pool' of EPs was diminished for a number of personal and workload reasons, while others were about to go on extended leave, or were just returning. In addition, not all the EPs in Training felt it was appropriate for them to be involved, mainly because of a combination of stage of career and workload. Furthermore, the study was conducted at a particularly difficult time for Local Government in general, and there was a move to the EPS becoming a Traded Service, as well as anticipating an office move. This resulted in a range of pressures on the EPS, and any request for collaboration from colleagues was a potentially sensitive matter. (See also 3.4.4 Ethical Issues).

The interview with the researcher presented the 9 EPs with a series of questions which provided the information relating to the study, with opportunities for seeking clarification and expanding individual topic areas through additional and supplementary questions. Some fruitful routes that were pursued with one EP were not necessarily with another, because the topic emerged from their response, rather than from the initial question.

With the EPs in Training and/or newly-qualified EPs, specific account was taken by the researcher of the possibility of adopting 'training' or mentoring styles in the interview; this was to minimise the possibility that the interviewer may want to expand on these EPs' views as part of professional development.

Ideally the question posed in the questionnaire about whether language difficulties can be masked would have been asked directly in the individual interviews, and if the study were replicated this would be included.

3.5.4.2 Phase III: Provision of training

No data were generated in this component of the current study

3.5.4.3 Phase IV: The follow-up interview [N] = 8 (Data B: post-) Appendix L.

A follow-up interview (post-) was conducted individually between the researcher and 8 of the 9 participant EPs, and individual debrief was also provided at this time. See Phase II for details of the interview process. This follow-up interview was conducted almost one academic year after the initial interview, and one EP had withdrawn and entered extended leave.

3.5.5 The end of study group discussion

3.5.5.1 Phase V: The group discussion [N]=8 (Data C) Appendix M.

A group discussion was held at the end of the study with the 8 remaining participant EPs following three terms of their participation in the study. It was informally chaired by the researcher and followed an outline structure, with notes being made throughout the session by the researcher. The comments from the interview and the group discussion have been combined in the results, as the researcher argues that the content of the EPs' comments is the focus of the study. However, some specific comments relate to their views on the power of sharing ideas with colleagues and, where relevant, this is noted.

All associated raw data are presented in digital format and included with the thesis.

3.6 DATA ANALYSIS

3.6.1 The questionnaire

The data from the questionnaire were summarised in an Excel spreadsheet to facilitate presentation in graphical format, but were not analysed further.

3.6.2 The semi-structured interviews and end of study group discussion

The qualitative data from the participant EPs' interviews, and combined with comments from the group discussion, have been analysed according to the process of Thematic Analysis as described by Braun and Clarke (2006) and are presented in tables and figures as relevant in Chapter 4 ~ Results. Owing to the lack of research in this area, the study is, of necessity, exploratory. A rich description of the entire data set is therefore the most appropriate choice, as a detailed account of one aspect would not be applicable.

Thematic analysis is a method for identifying patterns or themes, within a qualitative set of data and, as argued by Braun and Clarke (2006), it "minimally organises and describes your data set in (rich) detail" (p.6). Braun and Clarke go on to assert that, despite it being a widely-used method, there is "no clear agreement about what thematic analysis is and how you go about doing it" (p.6). The researchers continue by advising that "clarity around process and practice of method is vital" (p.7), and arguing that unless there is a clear understanding of the analytical method applied, the research cannot be properly evaluated, nor can it be compared with other research conducted within the same topic area.

According to Braun and Clarke (2006) Thematic Analysis should "be seen as the foundational method for qualitative analysis" (p.4) as the researchers assert that the skills within the approach can be transferred to other types of qualitative analysis. Whilst they note that other researchers regard this "foundational" element of the process as representing generic skills for this area, Braun and Clarke themselves argue for it being acknowledged as "a specific approach in its own right" (p.4).

Saldaña (2009) takes his advice about thematic analysis beyond the mechanics of the method to list the personal attributes of the researcher: these include the need to be organised, the capacity to "exercise perseverance", and the ability to deal with ambiguity (p.29). Further comments are offered by Arthur et al. (2012), who warn that there is a risk (especially when using coding software) of generating too many codes or the codes being so disorganised as to lose their usefulness, and whilst Arthur et al. acknowledge that this

confusion may "reflect the heterogeneity of the data", they also suggest that there is a risk that it could provide "a barrier to further analytic work" (p.255).

In applying a Thematic Analysis approach, Braun and Clarke advise researchers to take a logical progression of six steps towards the analysis of qualitative data. As it is this approach which has been chosen for the current study, this six-stage process is described by extracting the main features as described by Braun and Clarke (2006).

3.6.3 Thematic analysis

3.6.3.1 Thematic analysis phase 1: familiarising yourself with your data

Braun and Clarke write of "immersing yourself" in the data (p.16) in order to have a complete understanding of the total spread of the content, and to achieve this through reading and re-reading many times. This is an active process, considering possible emergent themes throughout, and holding an awareness of what should constitute a theme. Braun and Clarke acknowledge that this is a time-consuming process, but stress that it should not be hastened as it is the foundation of the whole analysis. As part of this degree of precision, interview data need to be transcribed, and Braun and Clarke assert that the process can be an aid to identifying emergent themes, and notes should be taken throughout this initial phase.

3.6.3.2 Thematic analysis phase 2: generating initial codes

The initial notes from the process of transcribing, reading and re-reading the data, form the basis for the initial coding i.e. the elements which the researcher regards as interesting. The codes selected may relate to a specific area of interest within the data, or may cross the majority of the data set. In this process, Braun and Clarke make a distinction between codes which are semantic, describing these as being explicit surface meanings and not going beyond the comments made by the participant, and latent ones, which the authors describe as being interpretive, going beyond the explicit semantic content and starting to identify underlying ideas and assumptions. In this way the process serves to organise the data in a meaningful manner. Braun and Clarke assert that the coded data "differ from the units of analysis (your themes) which are (often) broader" (p.18), going on to argue that the process of determining the difference between these two is the point at which the exploration of the data becomes analytical and interpretive and leads into Phase 3.

3.6.3.3 Thematic analysis phase 3: searching for themes

This phase organises the extensive list of codes into potential themes and combines the relevant codes under the possible themes, and these themes are overarching in their relationship to the constituent codes. Braun and Clarke suggest that a visual approach to this process (e.g.

mind maps or lists) can assist in exploring differing levels of codes and themes, and potential links across the different themes. They also suggest that it is acceptable to have a 'miscellaneous' group which do not fit anywhere, and which can be reviewed, "refined and separated, or discarded" (p.20) later in the process. At this stage the possible themes should be emerging, but still regarded as fluid, to some extent.

3.6.3.4 Thematic analysis phase 4: reviewing themes

Phase 4 is a process of refining the emergent themes, with the potential to discard some if they do not have sufficient supporting data, to combine others which are similar, or to separate out those which are sufficiently diverse in their constituent codes. Braun and Clarke advise that data "within themes should cohere together meaningfully while there should be clear and identifiable distinctions between themes" (p.20).

This phase involves two levels of reviewing and refining your themes, the first being at the level of the coded data whilst the second level explores the relevance of the theme to the entire data set. This is an iterative process, continuing until there is no further refinement required for the data. Braun and Clarke then argue for a detailed analysis for each of the overarching themes in a process which reflects the stages outlined: the researchers advise "identifying the 'story' that each theme tells" whilst also consider the "broader overall 'story' that you are telling about your data" (p.22) relating this to the research questions of the study.

3.6.3.5 Thematic analysis phase 5: defining and naming themes

This phase is a further refinement of the process of coding and deriving themes. Braun and Clarke advise that this stage should identify the "essence of what each theme is about" whilst simultaneously avoiding either getting "a theme to do too much" or the theme being "too diverse and complex" (p.22).

3.6.3.6 Thematic analysis phase 6: producing the report

In Braun and Clarke's analytic process, they advise that the writing up should "tell the complicated story of your data in a way which convinces the reader of the merit and validity of your analysis" whilst also providing a "concise, coherent, logical, non-repetitive, and interesting account of the story the data tell", with sufficient evidence e.g. data extracts, to support the argument created, embedding the whole within "an analytic narrative […] that goes beyond description of the data" (p.23) and relating this back to the study's research questions.

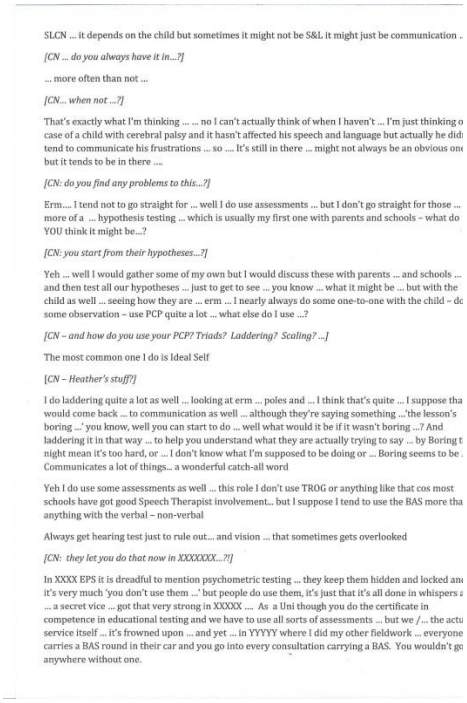
3.6.4 Thematic Analysis and the current study

This section relates Braun and Clarke's (2006) phases of thematic analysis to the stages of the data analysis process in the current study. See also:

- Appendix O: Coded extracts with additional context
- Appendix P: Progressive refinement of themes and subthemes.
- *Figure 20*: Visual map of themes and subthemes
- *Figure 21*: Visual representation of the dynamic relationship between the 3 super themes

3.6.4.1 Thematic analysis phase 1: familiarising yourself with your data

The interviews had been audio recorded and supported by accompanying handwritten notes in case of equipment failure. The process of transcribing the audio files was time-consuming and laborious as the interviews lasted from 45 to 90 minutes and resulted in many pages of complex information in conversational form. However, this process of transcription, with its constant need for rewind and repetition led to considerable familiarity with the data and proved invaluable for hearing again the content of the interview without the need to manage the discussion. Following Braun and Clarke's advice, the analytic process began at this stage, where potential initial codes began to emerge and were noted at that time.



SLCN ... it depends on the child but sometimes it might not be S&L it might just be communication ..

[CN ... do you always have it in...?]

... more often than not ...

[CN... when not ...?]

That's exactly what I'm thinking ... ... no I can't actually think of when I haven't ... I'm just thinking o case of a child with cerebral palsy and it hasn't affected his speech and language but actually he did tend to communicate his frustrations ... so .... It's still in there ... might not always be an obvious on but it tends to be in there ....

[CN: do you find any problems to this...?]

Erm.... I tend not to go straight for ... well I do use assessments ... but I don't go straight for those ... more of a ... hypothesis testing ... which is usually my first one with parents and schools – what do YOU think it might be...?

[CN: you start from their hypotheses...?]

Yeh ... well I would gather some of my own but I would discuss these with parents ... and schools ... and then test all our hypotheses ... just to get to see ... you know ... what it might be ... but with the child as well ... seeing how they are ... erm ... I nearly always do some one-to-one with the child – d some observation – use PCP quite a lot ... what else do I use ...?

[CN – and how do you use your PCP? Triads? Laddering? Scaling? ...]

The most common one I do is Ideal Self

[CN – Heather's stuff?]

I do laddering quite a lot as well ... looking at erm ... poles and ... I think that's quite ... I suppose tha would come back ... to communication as well ... although they're saying something ...'the lesson's boring ...' you know, well you can start to do ... well what would it be if it wasn't boring ...? And laddering it in that way ... to help you understand what they are actually trying to say ... by Boring t night mean it's too hard, or ... I don't know what I'm supposed to be doing or ... Boring seems to be Communicates a lot of things... a wonderful catch-all word

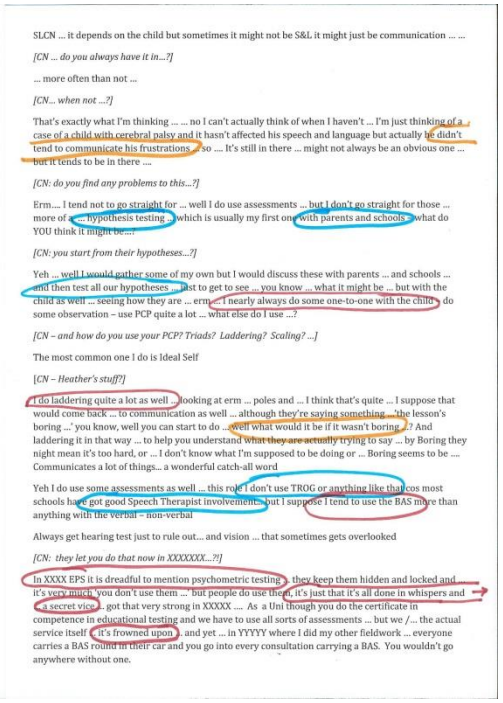
Yeh I do use some assessments as well ... this role I don't use TROG or anything like that cos most schools have got good Speech Therapist involvement... but I suppose I tend to use the BAS more tha anything with the verbal – non-verbal

Always get hearing test just to rule out... and vision ... that sometimes gets overlooked

[CN: they let you do that now in XXXXXXX...?!]

In XXXX EPS it is dreadful to mention psychometric testing ... they keep them hidden and locked an it's very much 'you don't use them ...' but people do use them, it's just that it's all done in whispers ... a secret vice ... got that very strong in XXXXX .... As a Uni though you do the certificate in competence in educational testing and we have to use all sorts of assessments ... but we /... the actu service itself ... it's frowned upon ... and yet ... in YYYYY where I did my other fieldwork ... everyone carries a BAS round in their car and you go into every consultation carrying a BAS. You wouldn't go anywhere without one.

3.6.4.2 Thematic analysis phase 2: generating initial codes



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... more often than not ...

[CN... when not ...?]

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[CN – and how do you use your PCP? Triads? Laddering? Scaling? ...]

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This phase occurred initially within the transcription process, where words or phrases were noted whether or not they related directly to the research questions. Further initial codes resulted from the reading and re-reading of the interview transcripts.

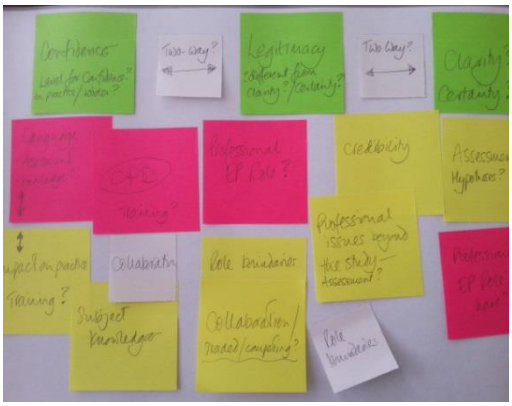
As these initial codes were identified as being potentially relevant to the study, both within and beyond the research questions, they were marked on the transcript.

3.6.4.3 Thematic analysis phase 3: searching for themes / phase 4: reviewing themes

As explained above, the initial and apparent chaos of the data began to take some form of broad organisation through familiarity with the data, and once the initial codes were noted on post-it notes and could be sorted and re-sorted, themes began to emerge, and some initial codes were discarded. This was an ongoing process over several days and weeks, with numerous revisions through grouping and re-grouping. It was recognised that there was no single definitive grouping to make and a decision was made to capture the most appropriate which reflected data at both levels: Braun and Clarke (2006) assert that stage 4 should be about "identifying the 'story' that each theme tells" whilst also considering the "broader overall 'story' that you are telling about your data" (p.22) and relating this to the research questions of the study.

3.6.4.4 Thematic analysis phase 5: defining and naming themes

Phase 5 of the thematic analysis procedure is the culmination of the iterative process of reviewing and collating the data, at the coded extracts level, and across the entire data set. The ongoing analysis associated with this process should generate clear definitions and names for each theme. Braun and Clarke (2006) go on to argue that, in phase 5, this further refinement should identify the "essence of what each theme is about" whilst simultaneously avoiding either getting "a theme to do too much" or the theme being "too diverse and complex" (p.22)

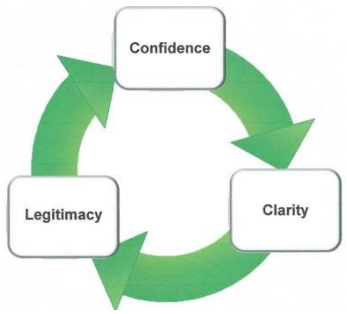


As discussed in the literature review, the critical realism perspective adopted for the current study acknowledges that a basic tenet of critical realism is that objective reality does exist, whilst also noting that this reality is interpreted through the individual belief systems of the participants within the study (Pawson and Tilley, 2008). The application of the thematic analysis process in the current study reflects this tenet of critical realism: the exploration of the themes in the data was both an interesting and a challenging one, in the quest to ensure that the themes represented discreet and meaningful categories, and both semantic (explicit surface meanings) and latent (interpretive) codes were produced during this stage coding (Braun and Clarke, 2006) (Appendix O). The resultant themes are the product of a decision-making process where the themes have been selected as being the most appropriate capture of the views and experiences expressed by the participants in the study.

3.6.4.5 Thematic analysis phase 6: producing the report

It was recognised that the presentation of the process and result of thematic analysis would be key to conveying this culmination of lengthy consideration of the content of the interview data in the most efficient manner. A visual map of these themes (*Figure 20)* has been created to illustrate them and their corresponding sub themes. The latent super themes in this study are conceptualised as being interdependent to represent a multi-directional dynamic impact of one upon the other: a figurative representation of this dynamic relationship has been provided (*Figure 21*).

Theme	Sub-theme
1. Language	• Importance of language • Language development • Assessment of language
2. Professional EP role	• Role boundaries • Collaboration • Credibility
3. Features of the study	• Training session • Assessment task • Children's responses to the assessment task • EPs' views of the child's experience of the assessment task
4. Post-study reflections on professional practice	• Confidence • Impact on practice • Extent of experience • Subject knowledge • Concerns • The process of CPD
5. Emotion	• Positive • Negative
6. Issues for professional debate	• Consultation vs casework • The discrepancy model • Use of psychometric tests of ability • How EPs gain their knowledge, skills and experience • Working with differing models of assessment within and beyond the profession • Timescale pressures vs assessment over time



The following chapter presents all the results from the study.

CHAPTER 4 ~ RESULTS

4.1 INTRODUCTION

In this chapter the quantitative data from the questionnaire are presented as graphs and tables, with bullet point summaries where relevant. There is also a small additional element of quantitative data from the participants' interviews. These data are presented under RQ 1.

The results of the thematic analysis of the qualitative interview data are presented under the combined heading of RQ 2 and RQ 3, and grouped under each of the six themes derived, followed by the three super themes posited by the researcher. The RQs have been combined to maintain coherence in the comments made which did not always fit readily under a single Research Question.

For ease of reading:

- all 20 of the EPS respondents are referred to as *all EPs* i.e. all members of the EPS, thereby including Trainee and Assistant EPs
- if it is pertinent to the data, only responses from qualified EPs are reported, and then the term *qualified* EPs is used [N]=15
- the 9 **(Phase II)** and subsequently 8 **(Phase IV)** EPs who were involved in the more focused aspect of the study are termed *participant EPs*

4.2 RESEARCH QUESTION 1.

RQ 1a.	*What are EPs' perceptions of, confidence in, and approach to exploring children's language development and its assessment?*
RQ 1b.	*Does the EPs' confidence in this area reflect their length of service?*
Source	Data (A): : EPS whole-service questionnaire survey [N]=20 Data (B: pre-) Participant EPs' self-rating in initial interview [N]=9 Data (B: pre-) Participant EPs' responses in initial interview [N]=9

4.2.1 RQ1a. Quantitative results

4.2.1.1 EPs' knowledge of children's language development Data (A): EPS whole-service questionnaire survey [N]=20

All the figures for research question 1a and 1b present the data obtained from the **Phase I** whole-service questionnaire and the **Phase II** participants' initial interview. The list of learning needs in the questionnaire has been split into 2 to ensure a clearer figure and for ease of reading. The following two figures present the responses to this question by:

Figure 9i	number of EP responses to the first 6 of the 12 areas of learning need listed in the questionnaire
Figure 9ii	number of EP responses to the second 6 of the 12 areas of learning need listed in the questionnaire

RQ 1a. *What are EPs' perceptions of, confidence in and approach to exploring children's language development and its assessment?*

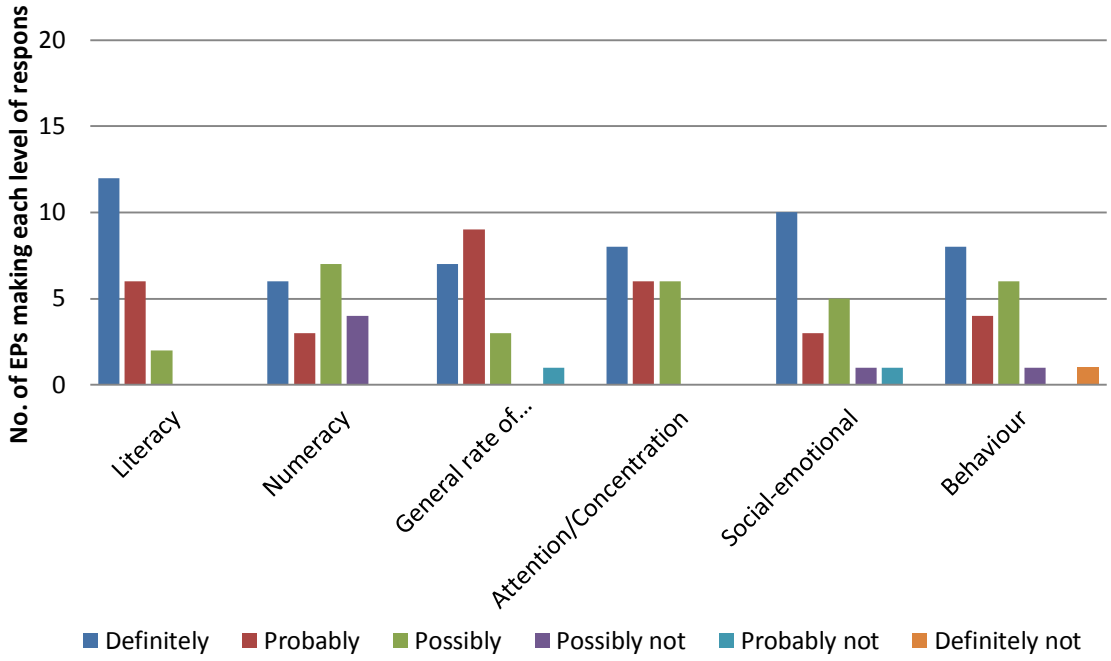


Figure 9i. EPs' perceptions of language as a major factor in individual learning needs.

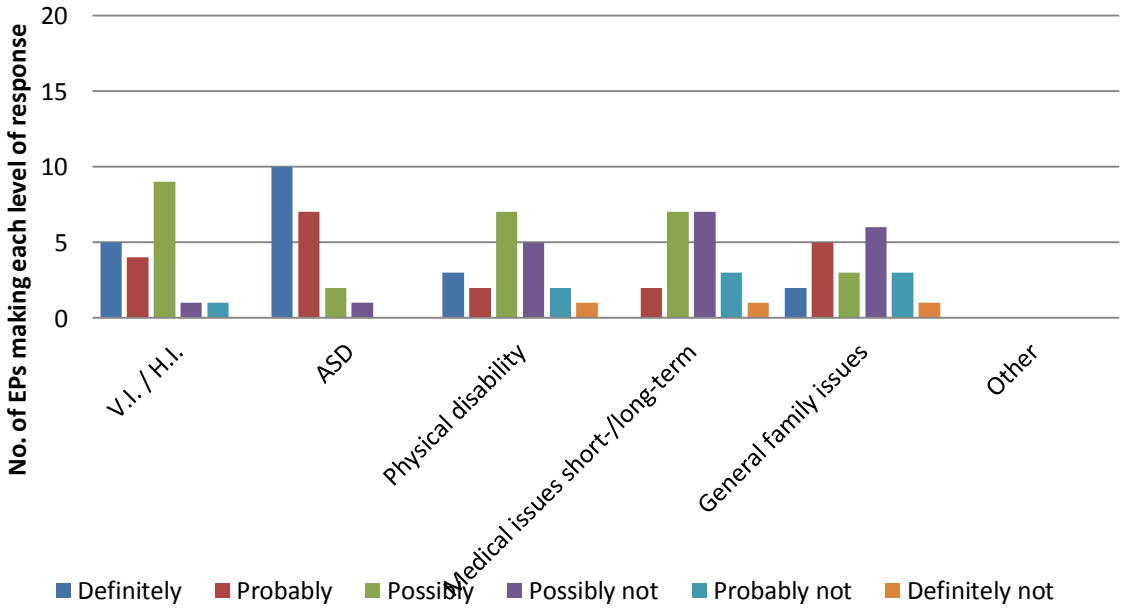


Figure 9ii. EPs' perceptions of language as a major factor in individual learning needs.

Summary of data presented in Figures 4i. and 4ii.

- **60%** (12 of 20) of EPs consider **that** language **is** *definitely* a major factor to explore in **Literacy difficulties, 30%** (6) said it was *probably* a factor to explore, **10%** (2) said it was *possibly* a factor to explore.
- **50%** (10 of 20) of EPs consider **that** language **is** *definitely* a major factor to explore in **ASD, 35%** (7) said it was *probably* a factor to explore**, 10%** (2) said it was *possibly* a factor to explore, and **5%** (1) said it was *possibly not* a factor to explore.
- **50%** (10 of 20) of EPs consider language **is** *definitely* a major factor to explore in **Social-emotional issues, 15%** (3) said it was *probably* a factor to explore, **25%** (5) said it was *possibly* a factor to explore, **5%** (1) said it was *possibly not* a factor to explore, and **5%** (1) said it was *probably not* a factor to explore.
- **40%** (8 of 20) of EPs consider **that** language **is** *definitely* a major factor to explore in **Attention & concentration issues, 30%** (6) said it was *probably* a factor to explore and **30%** (6) said it was *possibly* a factor to explore.
- **40%** (8 of 20) of EPs consider **that** language **is** *definitely* a major factor to explore in **Behaviour issues, 20%** (4) said it was *probably* a factor to explore, **30%** (6) said it was *possibly* a factor to explore, **5%** (1) said it was *possibly not* a factor to explore, and **5%** (1) said it was *definitely not* a factor to explore.
- **35%** (7 of 20) of EPs consider **that** language **is** *definitely* a major factor to explore in **General rate of learning issues, 45%** (9) said it was *probably* a factor to explore, **15%** (3) said it was *possibly* a factor to explore, **5%** (1) said it was *probably not* a factor to explore.
- **30%** (6 of 20) of EPs consider **that** language **is** *definitely* a major factor to explore in **Numeracy issues, 15%** (3) said it was *probably* a factor to explore, **35%** (7) said it was *possibly* a factor to explore, **20%** (4) said it was *possibly not* a factor to explore.
- **25%** (5 of 20) of EPs consider **that** language **is** *definitely* a major factor to explore in **H.I./V.I. issues, 20%** (4) said it was *probably* a factor to explore, **45%** (9) said it was *possibly* a factor to explore, **5%** (1) said it was *possibly not* a factor to explore, and **5%** (1) said it was *probably not* a factor to explore.
- **15%** (3 of 20) of EPs consider **that** language **is** *definitely* a major factor to explore in **Physical disability, 10%** (2) said it was *definitely* a factor to explore in **General family issues**, and **0%** consider that it was *definitely* a factor to explore in **Medical issues**.
- **No** EPs cited an 'Other' category of learning need.

The following four figures (10i. to 10iv.) present the same data as Figures 9**i.-9ii.** but with the EPs' responses organised into groups by similar levels of experience. Data presented by individual EP would potentially be identifiable, and the grouping thereby ensures anonymity of the individual EPs.

Figure 10i.	EPs in training [N]=5
Figure 10ii.	EPs with 1-5 years' experience [N]=5
Figure 10iii.	EPs with 6-15 years' experience [N]=5
Figure 10iv.	EPs with 16+ years' experience [N]=5

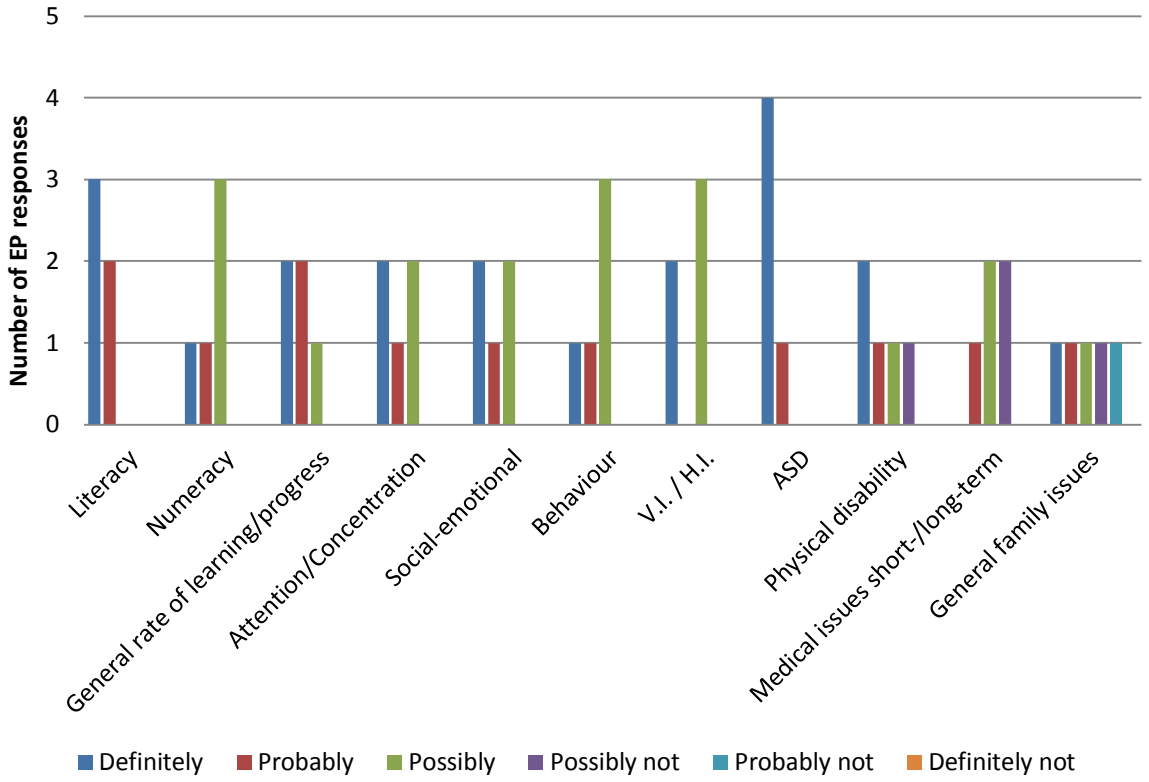


Figure 10i. EPs' perceptions of language as a major factor in individual learning needs. By years' experience (assistant EPs and EPs in training)

Summary of data presented in Figure 10i.

- A total of **100%** (5) of Assistant and Trainee EPs consider language either *definitely* or *probably* to be a major factor to explore in **ASD** i.e. **80%** (4) *definitely* and **20%** (1) *probably* a major factor to explore.
- A total of **100%** consider language *definitely* or *probably* to be a major factor to explore in **Literacy difficulties** i.e. **60%** (3) *definitely* and **40%** (2) *probably* a major factor to explore.
- 40% (2) of EPs consider language *definitely* to be a major factor to explore in **General rate of learning**, **Attention/concentration**, **Social-emotional** issues, **V.I./H.I.** and **Physical disability.**
- 20% (1 of 5) said it was *definitely* a factor to explore in **Numeracy** issues, **Behaviour** issues and **General family issues**.
- **0%** (0) said it was *definitely* a factor in **Medical issues** and no Assistant and Trainee EPs cited an 'Other' category of learning need.

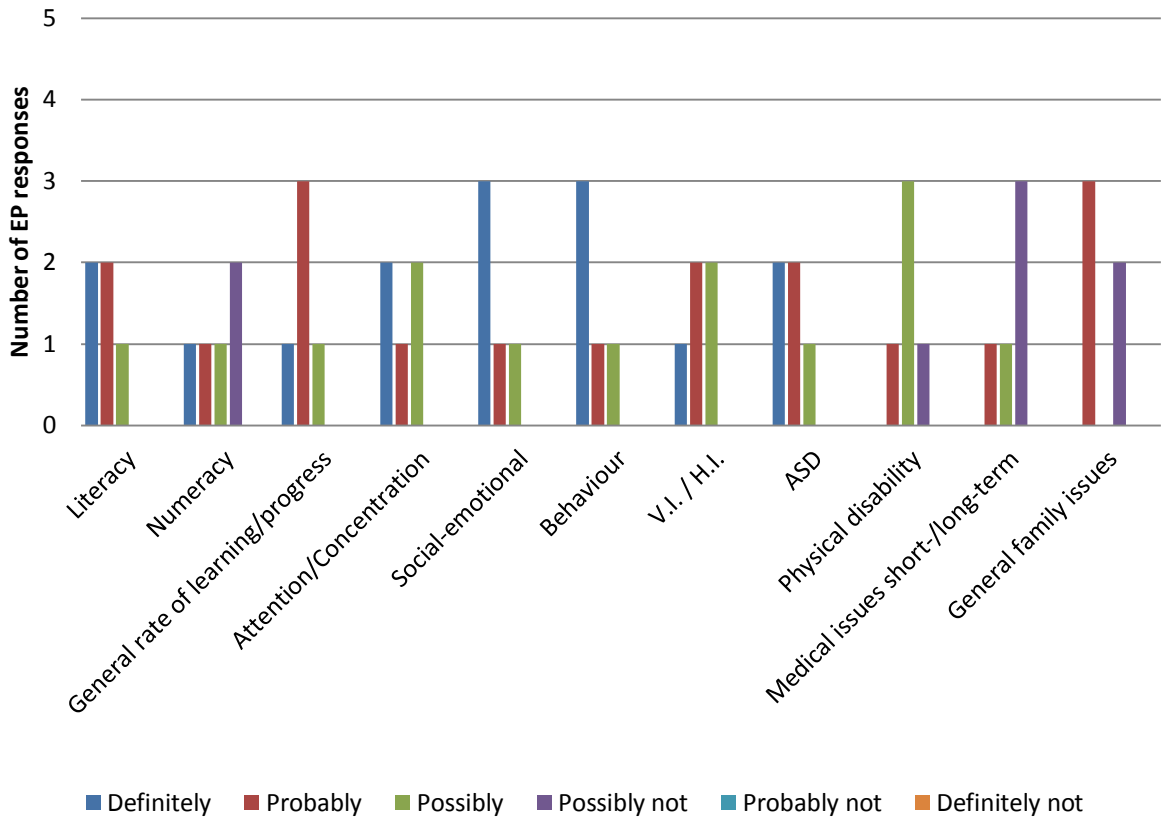


Figure 10ii. EPs' perceptions of language as a major factor in individual learning needs. By years' experience (EPs with 1-5 years' experience)

Summary of data presented in Figure 10ii.

- A total of **80%** (4) of EPs with 1-5 years' experience consider language either *definitely* or *probably* to be a major factor to explore in **Social-emotional issues** and **Behaviour** i.e. **60%** (3 of 5) *definitely* and **20%** (1) *probably* a major factor to explore.
- Fewer than half **- 40%** (2) of EPs consider language *definitely* to be a major factor to explore in **Literacy difficulties** and **ASD** although a further **40%** consider it to be *probably* a major factor to explore**.**
- **20%** (1) said it was *definitely* a major factor to explore in **Numeracy** issues, **General rate of learning** and **V.I./H.I.**
- **0%** (0) said it was *definitely* a major factor to explore in **Physical disability, Medical issues** or **General family issues** and no EPs cited an 'Other' category of learning need.

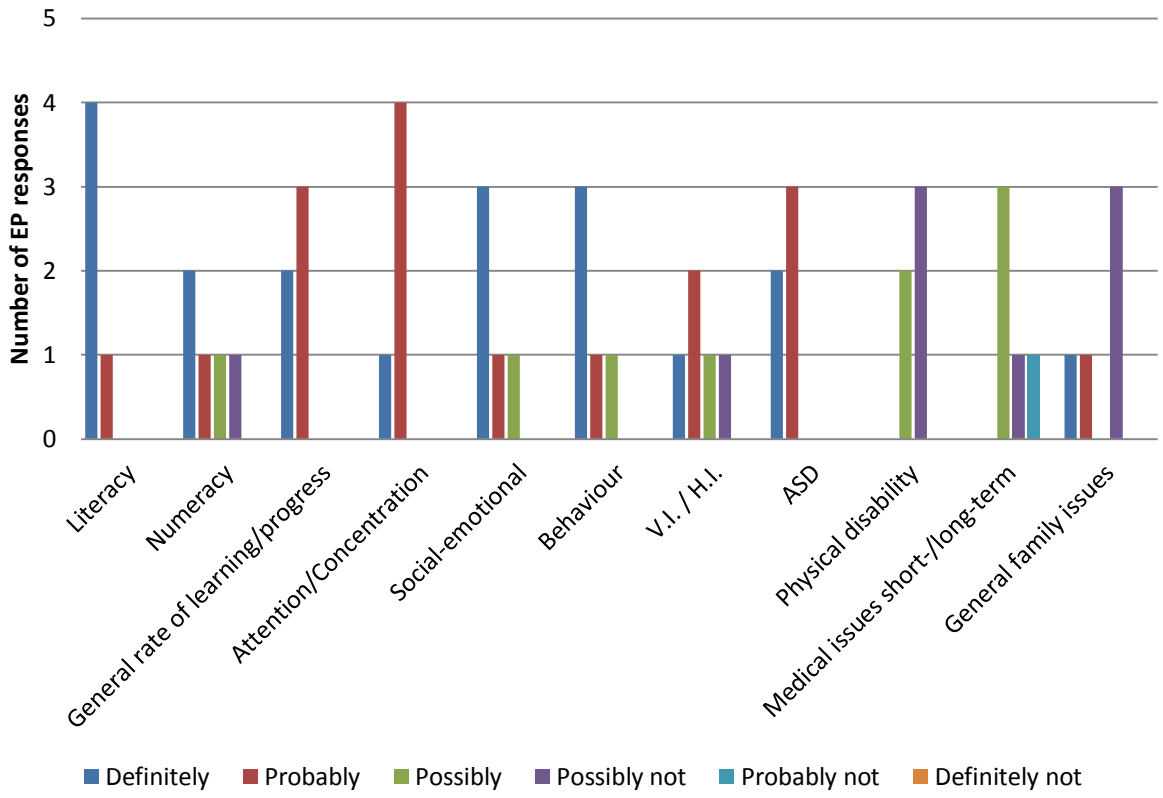


Figure 10iii. EPs' perceptions of language as a major factor in individual learning needs. By years' experience (EPs with 6-15 years' experience)

Summary of data presented in Figure 10iii.

- A total of **100%** (5) EPs with 6-15 years' experience consider language *definitely* or *probably* to be a major factor to explore in **Literacy** difficulties i.e. 80% (4) *definitely* and 20% (1) *probably* a major factor to explore.
- A total of **100% (**5) EPs consider language *definitely* or *probably* to be a major factor to explore in **ASD** i.e. 60% (3) *definitely* and 40% (2) *probably* a major factor to explore.
- **60%** (3) EPs consider language *definitely* to be a major factor to explore in **Social-emotional difficulties** and **Behaviour.**
- Only **20%** (1) EP considers language *definitely* to be a major factor to explore in **Attention and concentration.**
- Only **40%** (2) of EPs consider language *definitely* to be a major factor to explore in each of **Numeracy**, **General rate of learning** and **ASD.**

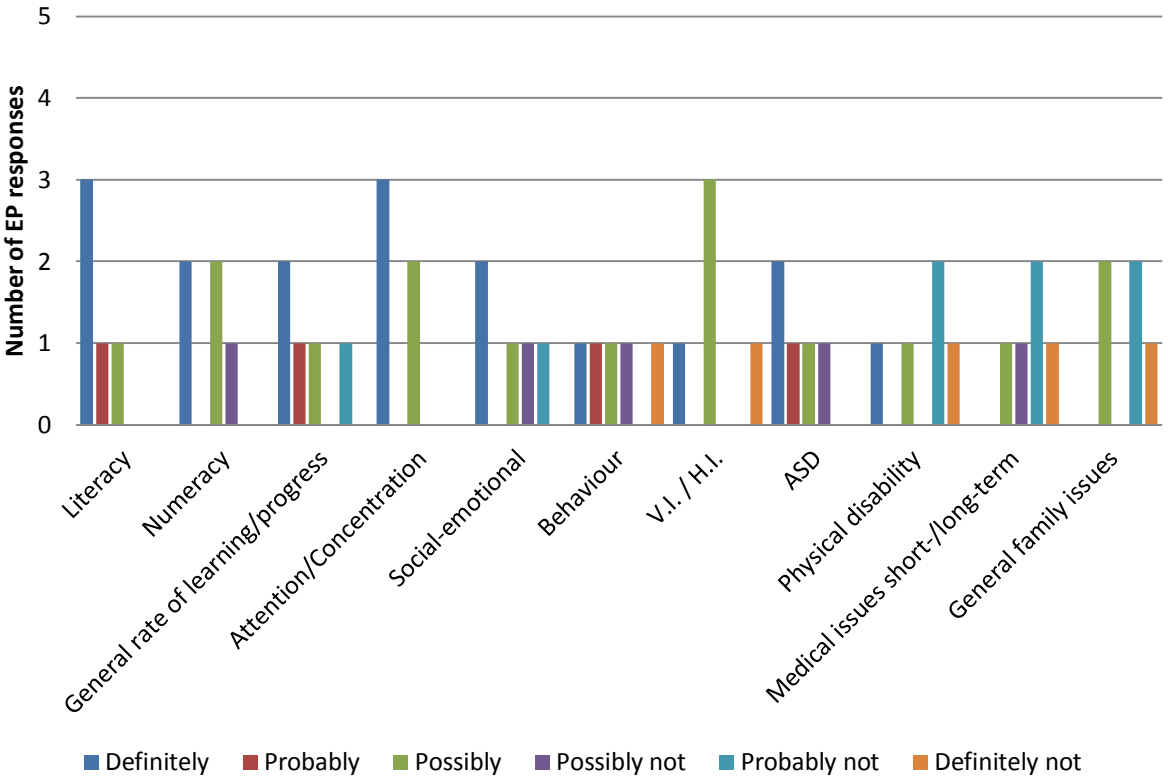


Figure 10iv. EPs' perceptions of language as a major factor in individual learning needs. By years' experience (EPs with 16+ years' experience)

Summary of data presented in Figure 10iv.

- Only **60%** (3 of 5) of **EPs with 16+ years' experience** consider language *definitely* to be a major factor to explore in **Literacy** and **Attention/concentration.**
- Fewer than half the EPs **40%** (2 of 5) of EPs consider language *definitely* to be a major factor to explore in **Numeracy, General rate of learning, Social-emotional issues** and **ASD.**
- Only 1 EP **(20%)** said it was *definitely* a major factor to explore in **Behaviour, V.I./H.I.** and **Physical disability.**
- **0%** (0) said it was *definitely* a major factor in **Medical issues** or **General family issues** and no EPs cited an 'Other' category of learning need.

The following two Figures (*11i.* and *11ii.*) present the EPs' perceptions of the possibility that language difficulties might be masked to the extent that a teacher or parent may not recognise that there were issues

i. by numbers of EPs responding with varying degrees of certainty of response to the questions

ii. by EPs' responses grouped by length of experience

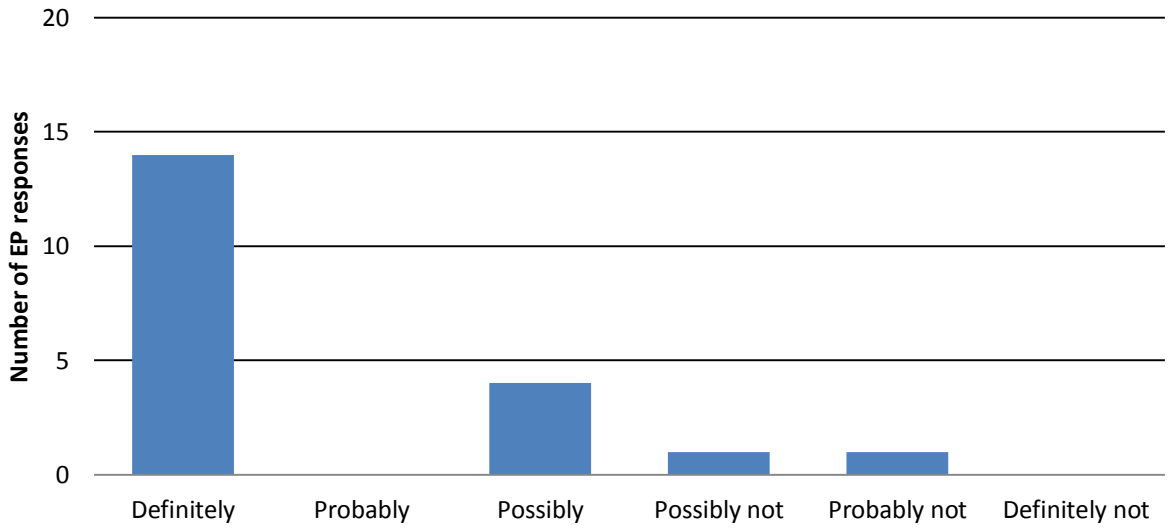


Figure 11i. EPs' perceptions of the likelihood that language difficulties might be masked

Figure 11i. Summary

- **70%** (14 of 20) EPs said that language difficulties could *definitely* be masked to the extent that a teacher or parent would not recognise them.
- **0%** (0) said that they *probably* could.
- **20%** (4) said that they *possibly* could.
- **5%** (1) said that they *possibly* could *not.*
- **5%** (1) said that they *probably* could *not.*

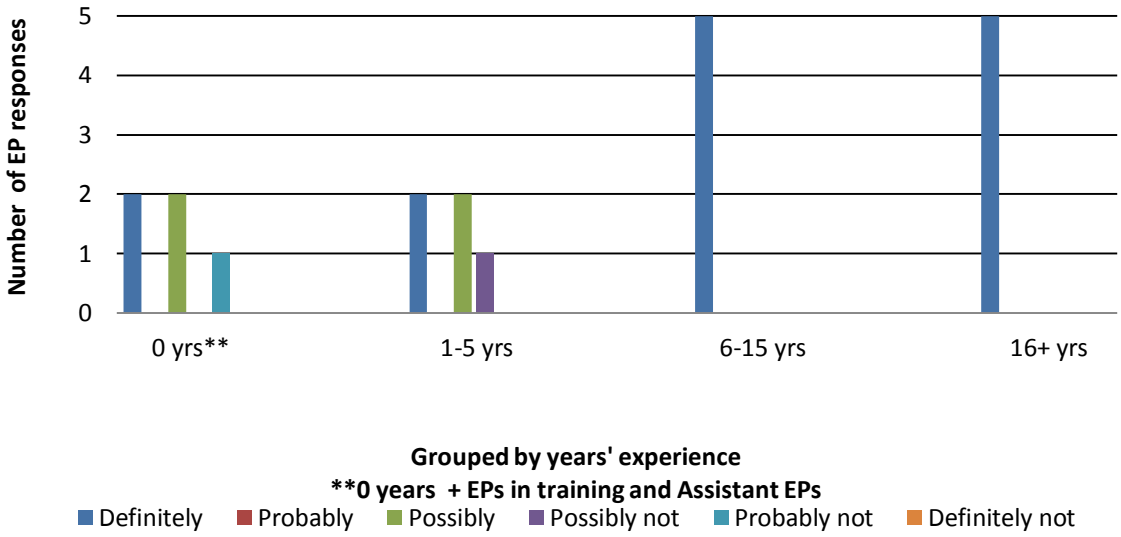


Figure 11ii. EPs' perceptions of the likelihood that language difficulties might be masked (by years' experience)

Figures 11i. & 11ii. Summary

- A total of **70%** (14 of 20) EPs said that language difficulties could *definitely* be masked.
- **100%** of **EPs with more than 6 years' experience (6-15 years' and 16+ years' experience)** said that language difficulties could *definitely* be masked i.e. half the number of respondents.
- However
- **40%** (2 of 5) of **Assistant and Trainee EPs** said that language difficulties could *definitely* be masked […], while **40%** (2) said that they *possibly* could, but **20%** (1) said that they *probably* could *not.*
- **Only 40%** (2) of **EPs with 1-5 years' experience** said that language difficulties could *definitely* be masked […], **40%** (2) said that they *possibly* could, and **20%** (1) said that they *possibly* could *not.*

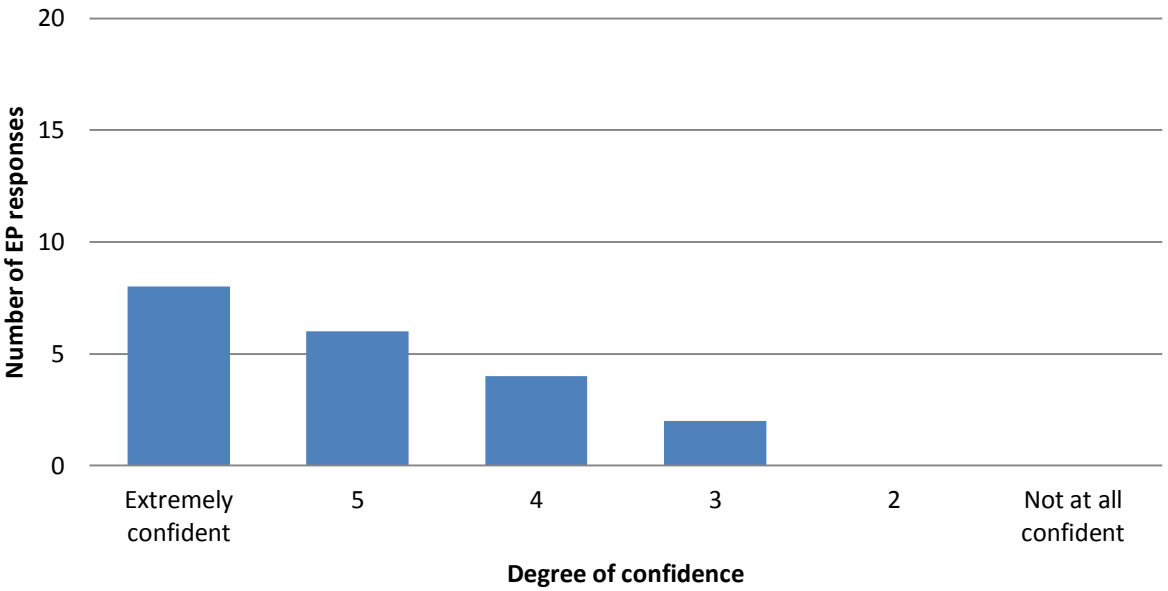


Figure 12i. EPs' confidence in recognising typical language development

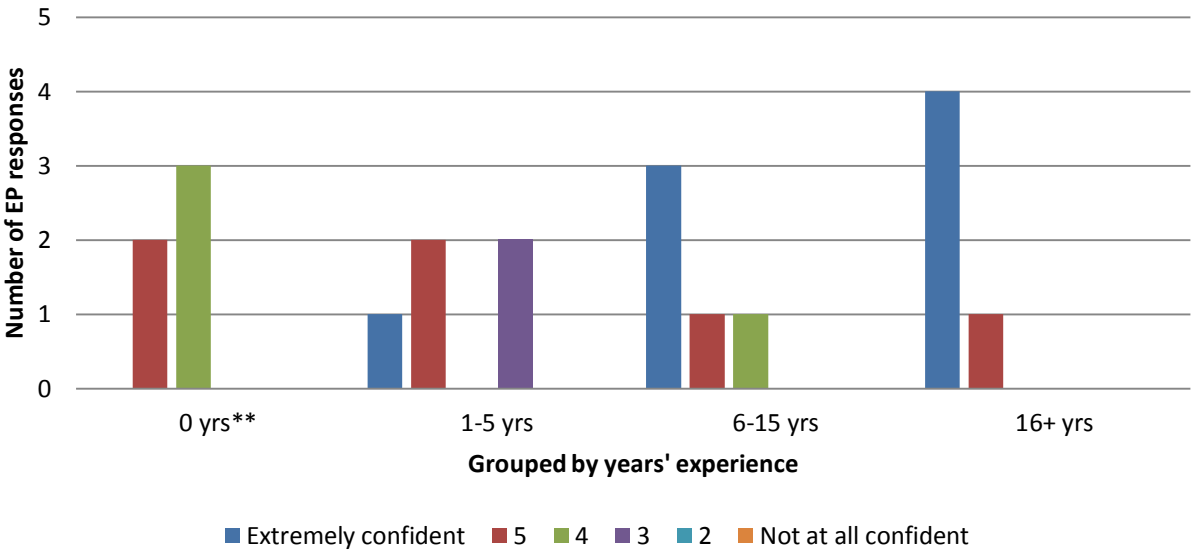


Figure 12ii. EPs' confidence in recognising typical language development (by years' experience)

NB see also 4.2.2. RQ1b.

Figures 12i & 12ii. Summary

- On a 6-point scale where 6 is *extremely confident* and 1 is *not at all confident*:
- The number of EPs marking 'extremely confident' increased with number of years' practice.
- 2 EPs with up to five years' practice marked their confidence as a 3 i.e. below the half-way point.
- The process of ensuring EP anonymity prevents more detailed analysis of the relationship between experience and confidence.

Table 6. Source of EPs' confidence in knowing typical language development

Source of knowledge	**[N]=10 (marking as many as relevant)**	
	Number of EP responses	% EP response
EP professional experience	10	100%
EP Training course	8	80%
Prior professional experience	7	70%
Personal/family experience	7	70%

Note: 10 of the 20 EPs responded to this question i.e. 50% of the EPS were sufficiently confident to identify the source of their knowledge

Table 6. Summary

- **100%** (10 of 10) EPs said that their *EP professional experience* provided confidence in knowing typical language development.
- **80%** (8) EPs cited their *professional training course* as a source of knowledge and confidence.
- **70%** (7) EPs cited their *prior professional experience* to undertaking the EP training.
- **70%** (7) EPs cited *personal* or *family* experience.

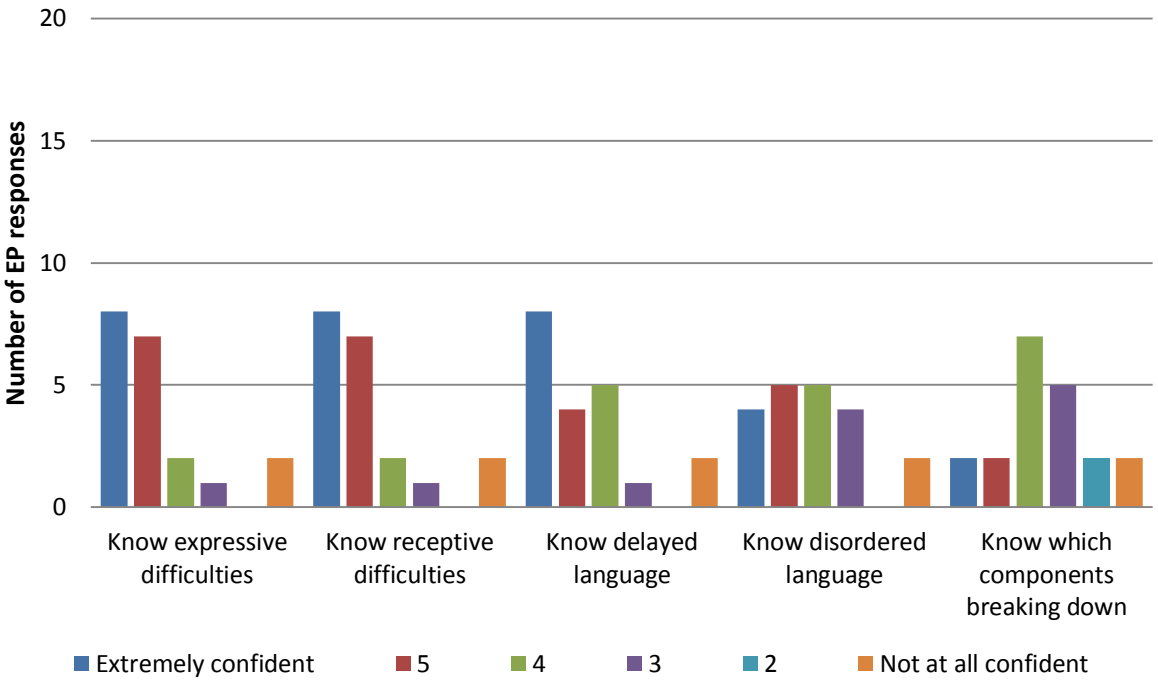


Figure 13i. EPs' confidence in recognising aspects of language difficulties

Figure 13i. Summary

On a 6-point scale where 6 is *extremely confident* and 1 is *not at all confident*:

- **40%** (8 of 20) EPs were *extremely confident* that they did know each of: the range of typical language development, expressive & receptive difficulties, and delayed language.
- **20%** (4) EPs were *extremely confident* that they knew disordered language.
- **10%** (2) EPs were *extremely confident* that they knew which component was breaking down.
- **25%** (5) EPs marked their confidence as a **3** for each of: knowledge of expressive, receptive and delayed language.
- **25%** (5) EPs marked their confidence as a **3** for knowledge of which component was breaking down.
- **20%** (4) EPs marked their confidence as a **3** for knowledge of disordered language.

10% (2) EPs marked *not at all confident* for knowledge of each of expressive, receptive, delayed and disordered language & which components might be breaking down.

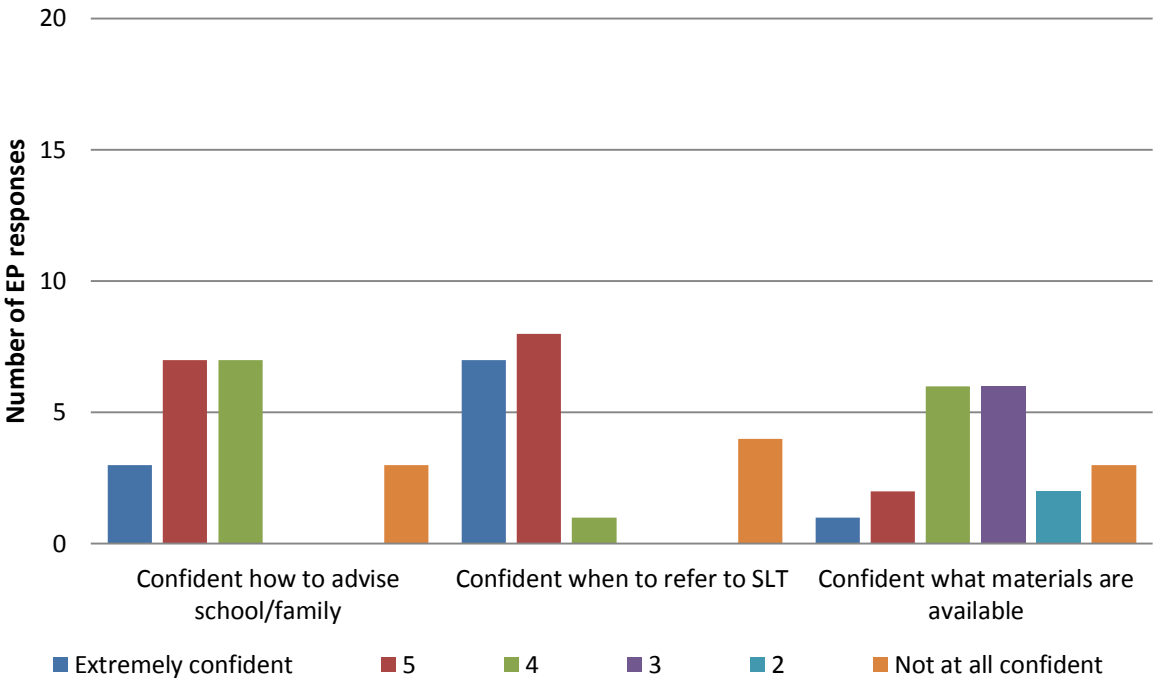


Figure 13ii. EPs' confidence in knowing how to advise

Figure 13ii. Summary

On a 6-point scale where 6 is *extremely confident* and 1 is *not at all confident*:

- Less than half of the EPs **- 35%** (7 of 20) were *extremely confident* that they knew when to refer to Speech and Language Therapy.
- Only **15%** (3) EPs were *extremely confident* that they knew how to advise school and family.
- Only **5%** (1) EP was *extremely confident* that they knew what support materials were available.
- **20%** (4) EPs were *not at all confident* that they knew when to refer to Speech and Language Therapy, while **15%** (3) EPs were *not at all confident* that they knew what support materials were available.

The following two figures (9i. and 9ii.) combine the responses to the two questions relating to confidence in recognising typical language development (Q.3.) and confidence knowing areas of difficulty in language development (Q.5.). The two figures combine data previously shown in Figure 7 (Confidence in knowing typical language development) and Figures 8i. and 8ii. (Confidence in knowing areas of difficulty in language development).

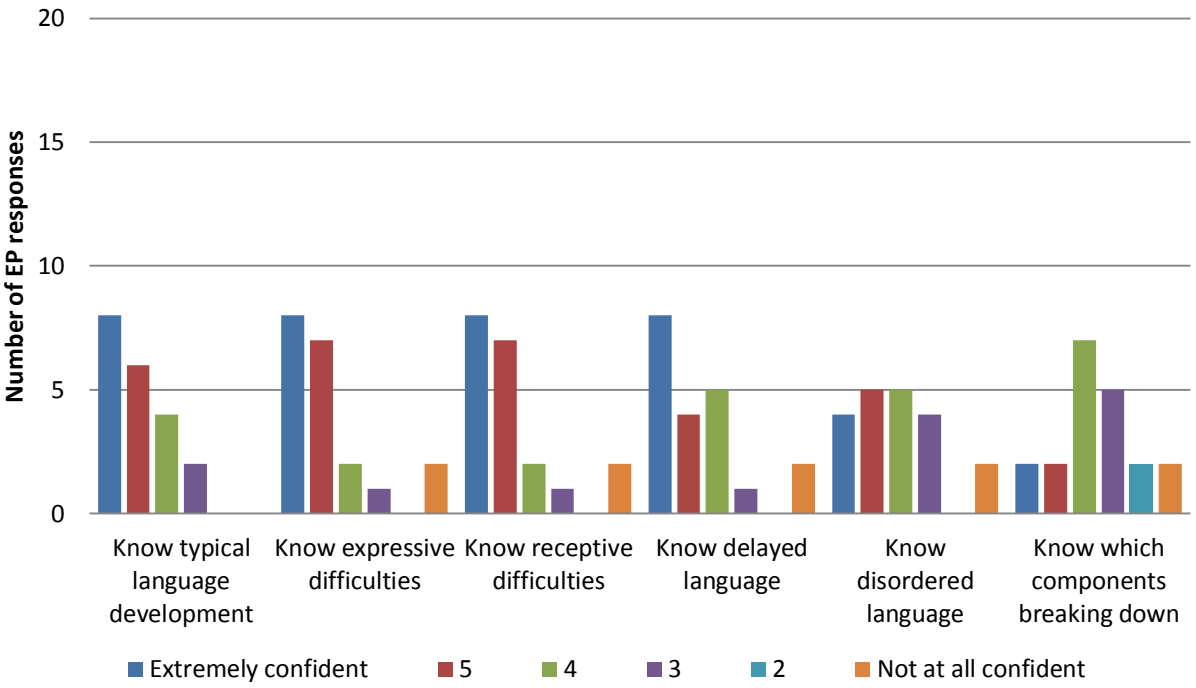


Figure 14i. EPs' confidence in knowing typical language and area of difficulty (all EPs [N]=20)

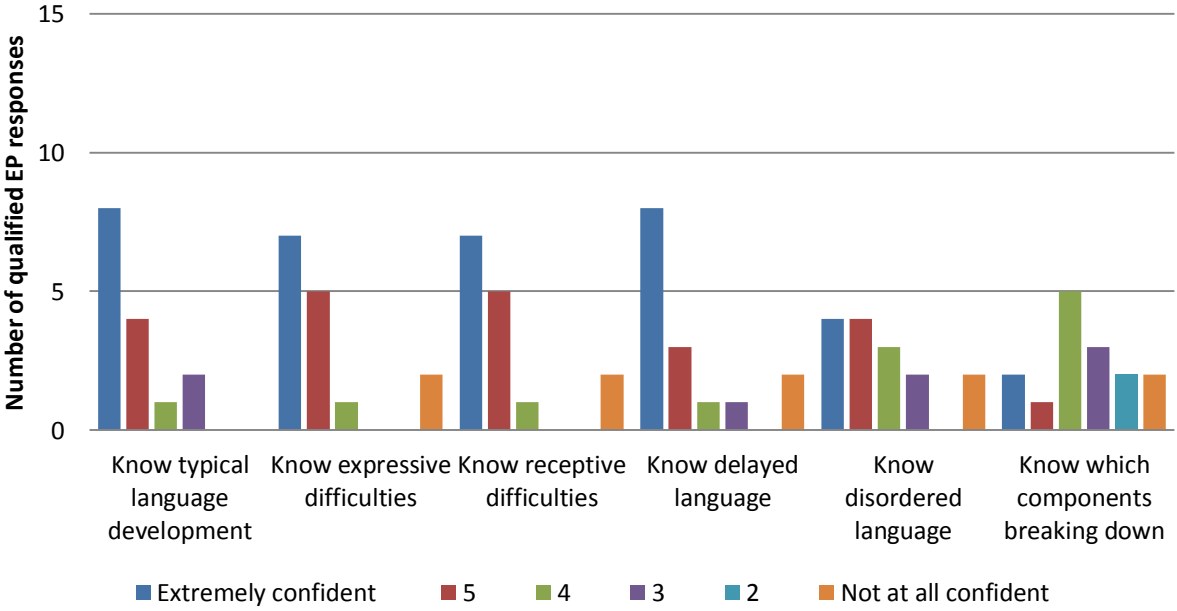


Figure 14ii. EPs' confidence in knowing typical language and area of difficulty (qualified EPs [N]=15)

Figures 14i. and 14ii Summary

Figure 14i presents results from the whole EPS, thereby combining the views of qualified EPS and those in training.

From Figure 14ii

- **53%** (8 of 15) of **qualified** EPs were *extremely confident* they knew typical language development and delayed language.
- **47%** (7) of EPs were *extremely confident* they knew expressive and receptive difficulties.
- For disordered language **26%** (4) were *extremely confident* in this area.
- For knowledge of which components might be breaking down, **13%** (2) were *extremely confident*.
- **No** EPs were *not at all confident* knowing typical language development, yet **13%** (2) were *not at all confident* they knew expressive or receptive difficulties, delayed or disordered language and, consequently which components might be breaking down.

The following four figures (15i. to 15iv.) present EPs' approach to assessment of children's language development with responses by all EPs [N]=20 or by qualified EPs [N]=15 as appropriate.

In these figures the following abbreviations used are:

WIAT:	Wechsler Individual Achievement Test
WISC:	Wechsler Intelligence Scale for Children
BAS:	British Ability Scales
CELF:	Clinical Evaluation of Language Fundamentals

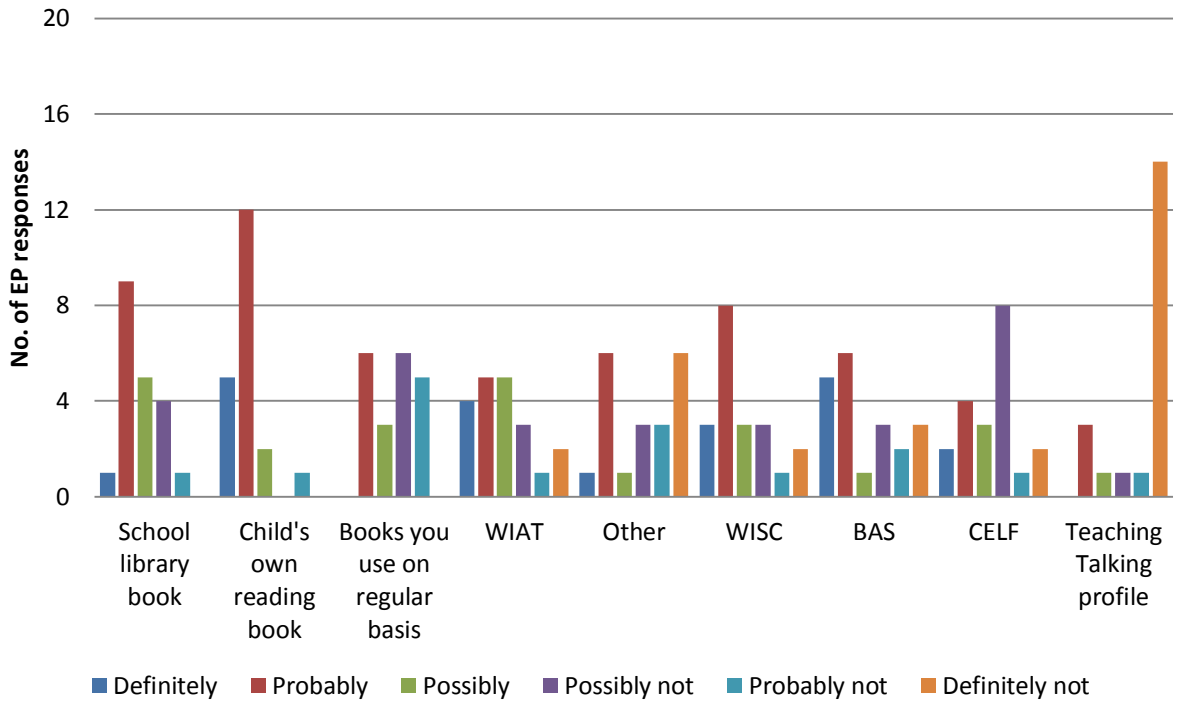


Figure 15i. EPs' approach to the assessment of children's language (all EPs [N]=20)

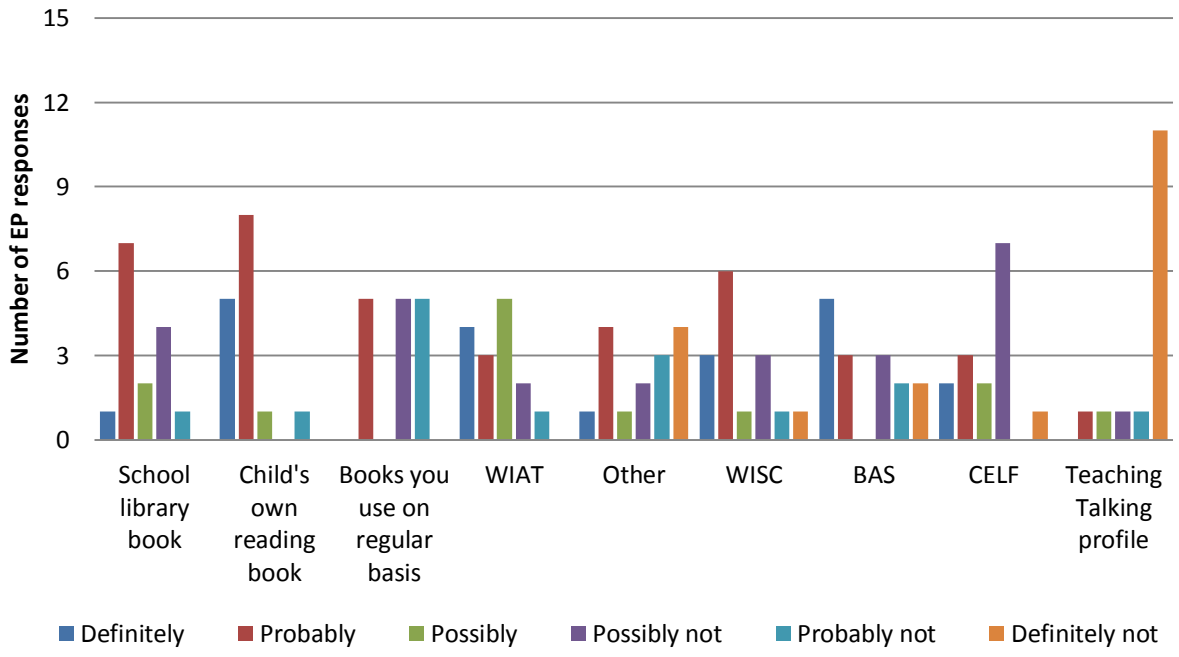


Figure 15ii. EPs' approach to the assessment of children's language (qualified EPs [N]=15)

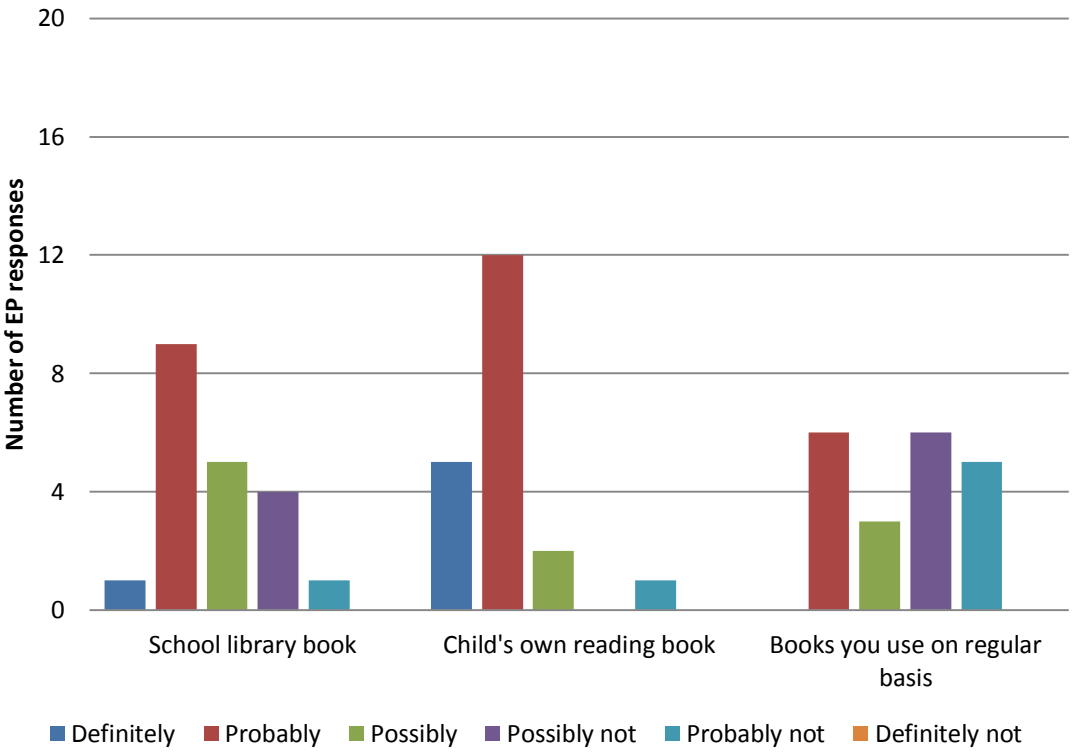


Figure 15iii. EPs' approach to the assessment of children's language (use of books - all EPs [N]=20)

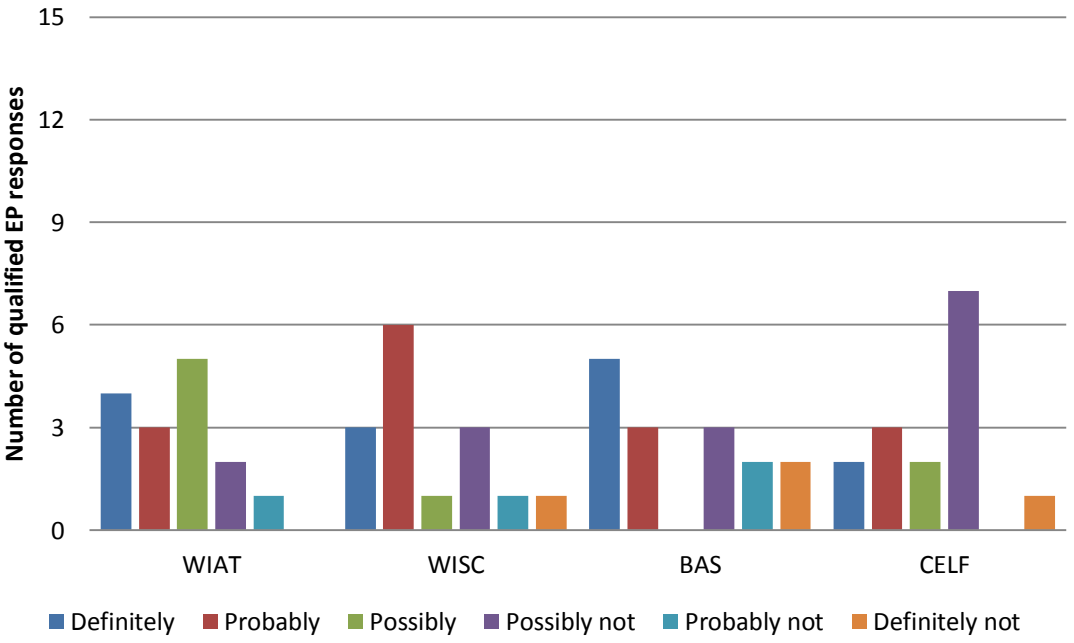


Figure 15iv. EPs' approach to the assessment of children's language (use of psychometrics - qualified EPs [N]=15)

Figures 15i. to 15iv. Summary

Use of books (data from 20 EPs)

- A total of **85%** (17 of 20)of the EPs would *definitely* or *probably* use a child's own reading book to explore a child's language development i.e. **25%** (5) would *definitely* and **60%** (12) would *probably* use.
- A total of **50%** (10) EPs would *definitely* or *probably* use a **school library book** […] i.e. **5%** (1) *definitely* and **45%** (9) *probably.*
- 30% (6) EPs would *probably use* **books that they used on a regular basis**, but 25% (5) EPs would *probably not use* books used on a regular basis.
- **5%** (1) EP would probably not use a **school library book .**

Use of psychometrics (data from 15 qualified EPs but see also Assistants & Trainees)

- A total of **60%** (9) EPs would *definitely* or *probably* use the **WISC** to explore a child's language development i.e. **3** would *definitely* and **6** would *probably* use it.
- A total of **53%** of qualified EPs (8) would *definitely* or *probably* use the BAS i.e. **5** would *definitely* and **3** would *probably* use it.
- A total of **47%** (7) EPs would *definitely* or *probably* use the **WIAT** i.e. **4** would *definitely* and **3** would *probably* use it.
- A total of **33%** (5) EPs *definitely* or *probably* use the **CELF** i.e. **2** would *definitely* and **3** would *probably* use it.
- **13%** (2) EPs would *definitely not use* the **BAS or** the **child's own reading book**.
- **5%** (1) EP would *definitely not* use the **CELF** and **5%** (1) EP would *definitely not* use the **WISC**.
- **45%** (9) **EPs** of the whole EPS would *definitely* to *possibly* use the **CELF** (*Figure 15i*), although Figure 15ii shows that these 9 are not all qualified EPs: **7 qualified EPs** would use the **CELF** at the same level of certainty, indicating that 2 unqualified EPs would use the CELF.
- Use of Teaching Talking Profile.
- A total of **70%** (14 of 20) EPs and **73%** of qualified EPs (11 of 15) would *definitely not* use the **Teaching Talking Profile**.

4.2.2 RQ1b. Quantitative results

RQ 1b.	*Does the EPs' confidence in this area reflect their length of professional experience?*
Source	Data (A): : EPS whole-service questionnaire survey [N]=20 Data (B: pre-) Participant EPs' self-rating in initial interview [N]=9 Data (B: pre-) Participant EPs' responses in initial interview [N]=9

From the data generated by the whole EPS survey questionnaire, the relationship between years' experience and level of confidence has already been shown in Figure 12ii and is repeated here for consistency of presentation and ease of finding specific information within the thesis.

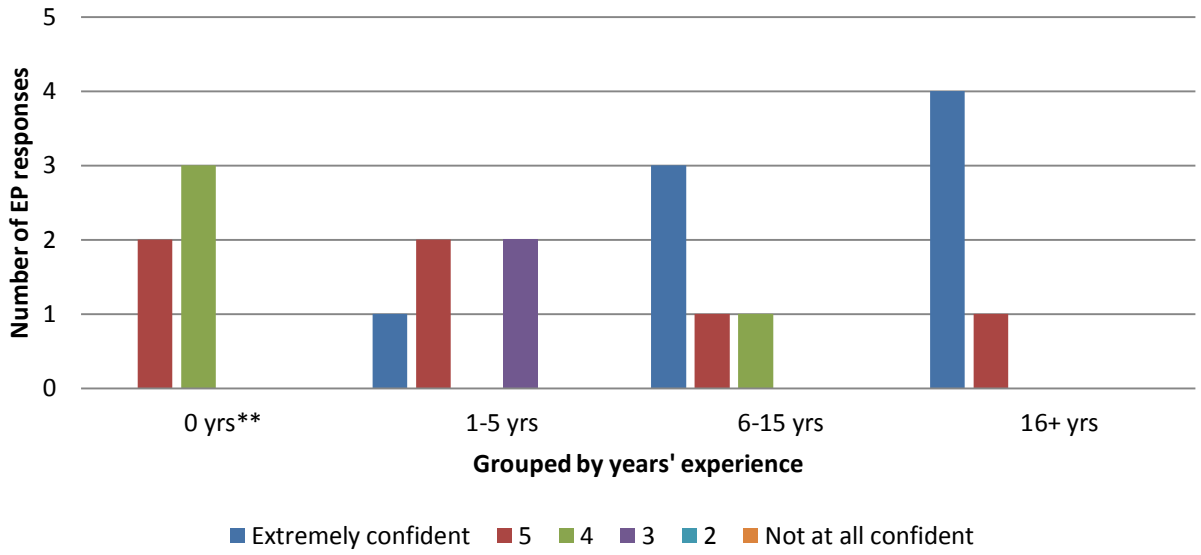


Figure12ii. NB Repeated from previous section. EPs' confidence in recognising typical language development (by years' experience)

When looking across the whole EPS it could be anticipated that the numbers of EPs who will mark that they *extremely confident* in the area of language development will increase with increased professional experience. As the graph shows, 0% are *extremely confident* in the 0 years group, rising to 5% of the whole service (but 20% of the 1-5 years' experience group), then 15% of the whole service (60% of the 6-15 years' experience group) and to 20% of the whole service (80% of the 16+ years' experience group) who mark that they *extremely confident*.

At the outset of the study, and prior to either the initial interview with the researcher or the provision of the training, the 9 participant EPs gave a scaling (1 low to 10 high) for their confidence levels in assessing children's language both at the outset of the study, and at its conclusion. The EPs' ratings are grouped by years' experience to minimise identification.

At the end of the initial interview and discussion, but prior to any further input, 3 of the 9 EPs reviewed their self-rating score of their confidence, and requested it be changed and, in each case, lowered. The initial self-rating score for each of these EPs is shown in [brackets] and their adjusted score is the one used in the figure.

Table 7. EPs' Self-rating of confidence at the outset of the study

EP length of experience	**0-4 years**			**5-10 years**			**11+ years**		
Initial self-rating	**5**[7]	**8**	**6**	**6** [7]	**3** [4]	**5**	**8**	**4**	**5**

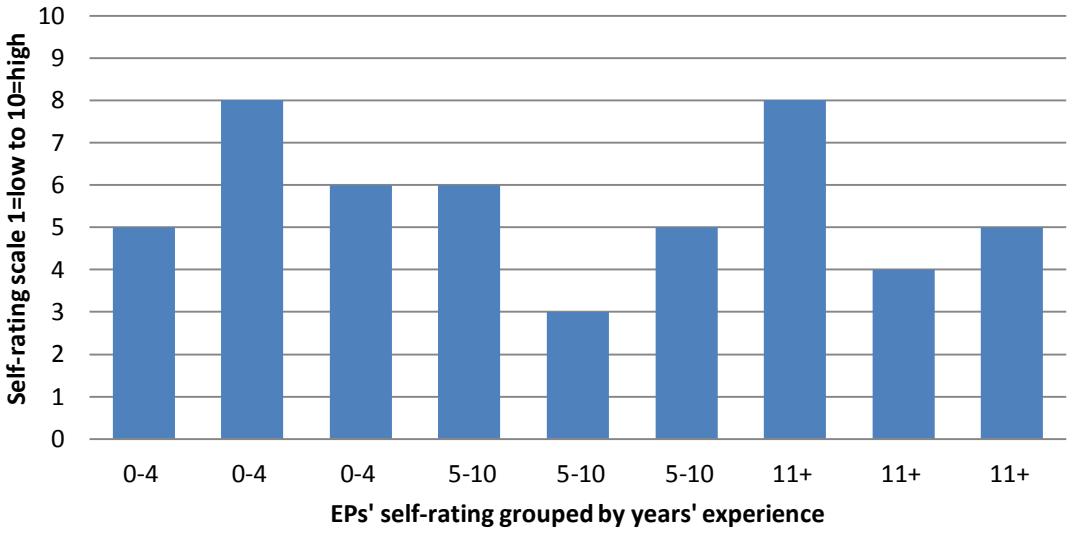


Figure 16. EPs' self-rating of confidence at outset of study, grouped by years' experience [N]=9

Figure 16. Summary

There appeared to be no evident relationship between length of experience as an EP and confidence in assessing children's language development:

- The three EPs who readjusted their self-rating following the interview all lowered their self-rated level of confidence
- **2** EPs (length of experience 0-4 years and 11+ years) self-rated **8** at the outset of the study
- **2** EPs (0-4 and 5-10 years) self-rated **6** at the outset of the study
- **3** EPs (0-4, 5-10 and 11+ years) self-rated **5** at the outset of the study
- **1** EP (11+ years) self-rated **4** at the outset of the study
- **1** EP (5-10 years) self-rated **3** at the outset of the study

4.2.3 Summary of RQ1. quantitative data

RQ 1a.	*What are EPs' perceptions of, confidence in, and approach to exploring children's language development and its assessment?*
RQ 1b.	*Does the EPs' confidence in this area reflect their length of service?*
Source	Data (A): : EPS whole-service questionnaire survey [N]=20 Data (B: pre-) Participant EPs' self-rating in initial interview [N]=9 Data (B: pre-) Participant EPs' responses in initial interview [N]=9

The data relating to Research Question 1 are derived from a whole-service questionnaire. Where length of professional EP experience might be relevant, and in order to preserve anonymity, responses have been grouped to disguise individual EPs whilst giving an indication of length of experience.

The 20 respondents comprised 15 qualified EPs, 3 Trainee EPs and 2 Assistant EPs and the majority of the figures were based on the responses from all 20.

Where appropriate, and primarily because of access to specific assessment materials, some figures were based upon responses from the 15 qualified EPs. The questions explored general views and confidence in relation to:

- the role of language in a range of learning needs
- the extent to which language difficulties are evident or whether they might be masked
- knowledge of typical and atypical language development and the source(s) of such confidence
- knowledge of how to advise schools and families
- use of formal and informal assessment approaches to explore a child's language development

Comparison of figures highlights some anomalies:

- **Figure 11i** shows that **70%** of EPs consider that language difficulties can *definitely* be masked
- **Figure 12i** shows that only **40%** of EPs are *extremely confident* in knowing typical language development
- **Figure 13i** shows that only **40%** are *extremely confident* in knowing delayed language and only **20%** are *extremely confident* in knowing disordered language

In terms of confidence relating to length of professional practice, there was no evident trend in the 9 participant EPs; however, when taken across the whole EPS the data showed a continuing increase in confidence as the length of professional experience and years' service increased.

4.3 RESEARCH QUESTION 2.

RQ 2a.	*Does EPs' confidence in assessing children's language change following a training session in language difficulties and the use of a specific assessment?*
RQ 2b.	*Does any **change** in the EPs' confidence in this area reflect their length of service?*
Source	Data (B: pre-) Participant EPs' self-rating in initial interview [N]=9 Data (B: pre-) Participant EPs' initial interview [N]=9 Data (B: post-)Participant EPs' self-rating in follow-up interview [N]=8* Data (B: post-)Participant EPs' follow-up interview [N]=8*

*One EP was not available for the follow-up.

4.3.1 RQ2a.& 2b. Quantitative results

Of the 9 original participant EPs only 8 were available for the follow-up interview at the end of the study three academic terms later. Each EP repeated the self-rating exercise of their confidence in the area of assessment of children's language.

Table 8 illustrates the extent of change in the EPs self-rating at the end of the study. The EPs' self-ratings are grouped by years' experience.

Table 8. The change in EPs' confidence grouped by years' practice

EPs grouped by length of experience	**0-4 years ***			**5-10 years**			**11+ years**		
Scaling pre- **	5	8	6	6	3	5	8	4	5
Scaling post-	9	9	---	8	6	4	8	6	6
Change	**+4**	**+1**	**---**	**+2**	**+3**	**-1**	**0**	**+2**	**+1**

Note: *One EP was not available for the follow-up. ** Only the revised scores from the EPs' initial self-rating are given here

The same data presented graphically:

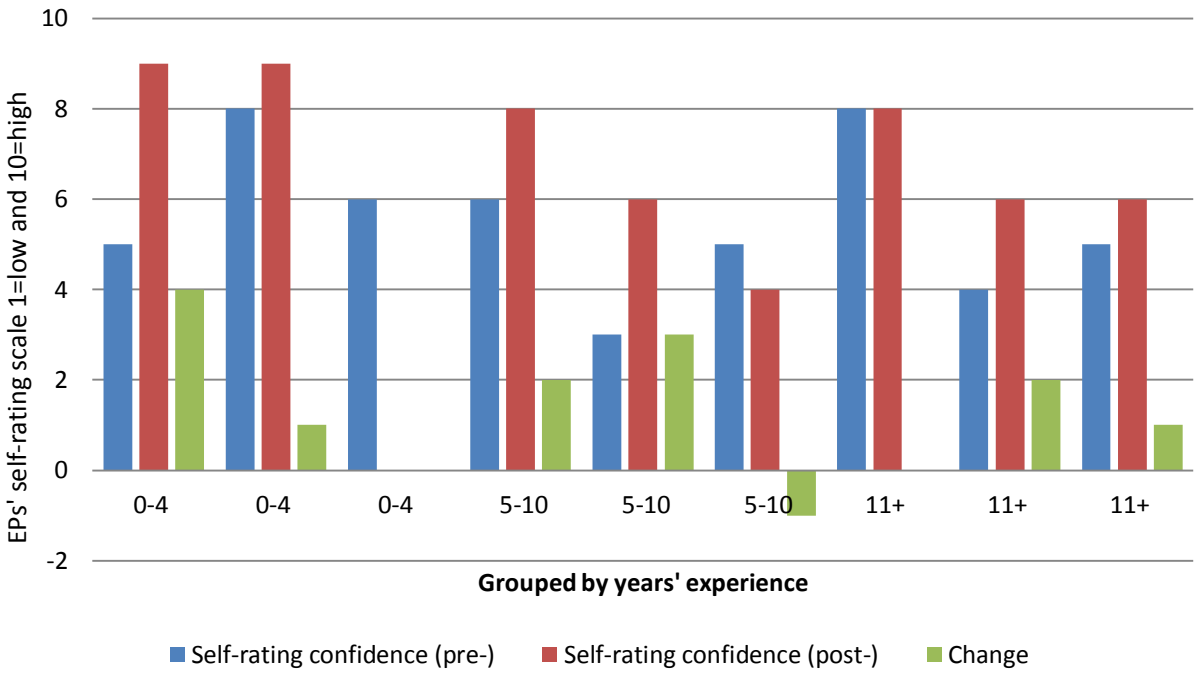


Figure 17. EPs' change in confidence following the study

Table 8. and Figure 17. Summary

- The EPs' self-reported increase in confidence occurred in each of the three groupings of number of years' professional experience.
- Increase in confidence appeared not to relate to number of years' experience
- The possible reasons behind the 2 EPs whose confidence either remained the same or decreased are discussed in Chapter 5

Qualitative results for research questions 2 and 3 have been combined and presented in the section 4.5. Thematic analysis

4.4 RESEARCH QUESTION 3.

RQ 3a.	*Is a training session in language difficulties and using the specific assessment useful to the EPs in their practice?*
RQ 3b.	*Has the training session in language difficulties and using the assessment changed how the EPs will subsequently assess language?*
Source	Data (B: post-)Participant EPs' follow-up interview [N]=8** Data (C): Comments from the group discussion

4.4.1 RQ3. Quantitative results

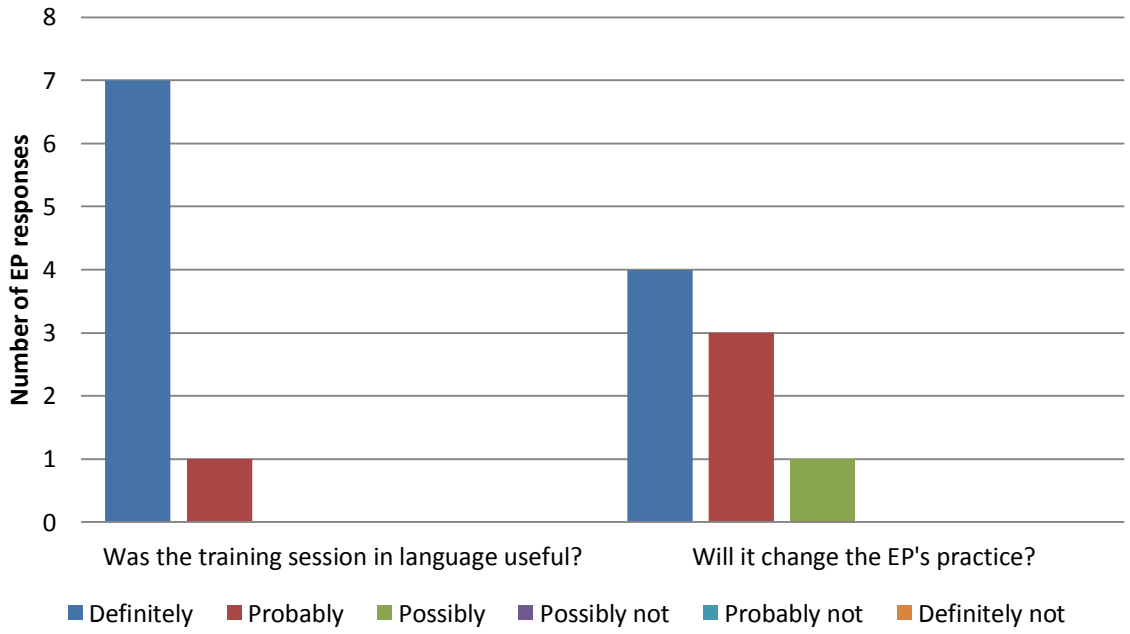


Figure 18. The training session: Was it useful? Will it change an EP's practice?*

*See also Section 5.7.2

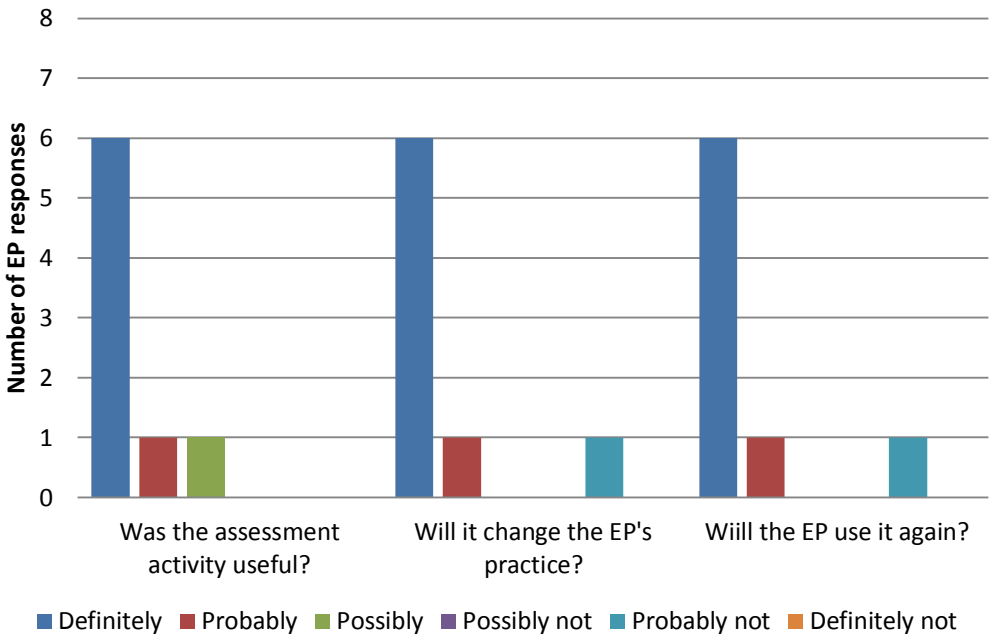


Figure 19. The assessment activity: Was it useful? Will it change an EP's practice? Will the EP use it again?

Figure 19. Summary

- 75% (6 of 8) of the EPs *definitely* found the assessment activity useful, while 1 EP said it was *probably* useful and 1 EP said they *possibly* found it useful.
- 75% (6 of 8) of the EPs said it would *definitely* change their practice, while 1 EP said it would *probably* change their practice and 1 said it would *probably not.*
- 75% (6 of 8) of the EPs would *definitely* use the assessment activity again, while 1 EP said they would *probably* use it again and 1 said they would *probably not* use it again.

4.5 RESEARCH QUESTIONS 2. & 3. QUALITATIVE RESULTS - THEMATIC ANALYSIS

A visual map of the themes derived follows, with details and examples by theme and associated sub-theme.

4.5.1 Visual map of the themes and sub-themes derived from thematic analysis

Figure 20. A visual map of the themes and sub-themes derived from thematic analysis

Theme	Sub-theme
1. Language	• Importance of language • Language development • Assessment of language
2. Professional EP role	• Role boundaries • Collaboration • Credibility
3. Features of the study	• Training session • Assessment task • Children's responses to the assessment task • EPs' views of the child's experience of the assessment task
4. Post-study reflections on professional practice	• Confidence • Impact on practice • Extent of experience • Subject knowledge • Concerns • The process of CPD
5. Emotion	• Positive • Negative
6. Issues for professional debate	• Consultation vs casework • The discrepancy model • Use of psychometric tests of ability • How EPs gain their knowledge, skills and experience • Working with differing models of assessment within and beyond the profession • Timescale pressures vs assessment over time

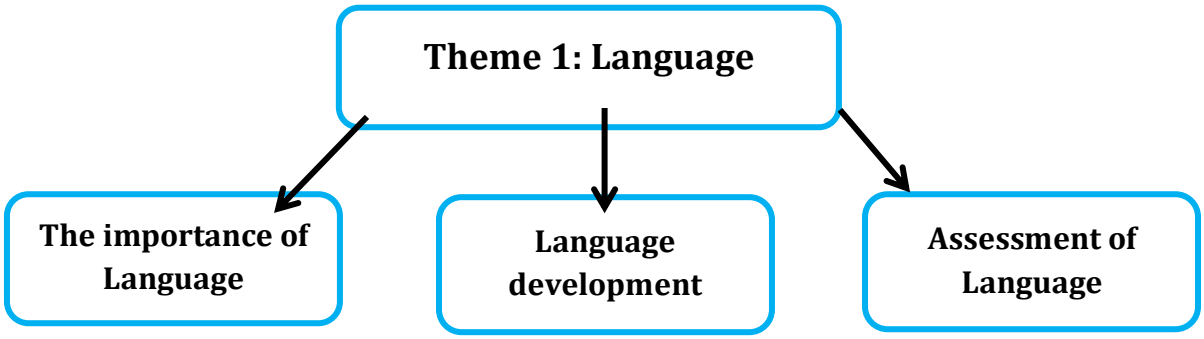
If a relevant comment is from only one EP, it is noted in the text that it is a single view. Otherwise the views held and the comments made, are described by the use of the term *several* to mean from 2 to 4 EPs, while *most* means it was commented on by 5 EPs or more.

The quotes have been edited to make them as brief as possible, but without losing the 'live' character of the comments made by the EP during the interviews. Occasionally more substantial quotes have been included to demonstrate the range of issues arising and opinions provided.

4.5.2 Details and examples by theme and associated sub-themes

The quotes have been selected to illustrate some of the key features of the EP role which are, arguably, the diversity of situations which an EP will meet, the range of contributory factors which the EP will already be considering when first meeting a child, and the active process of sifting and sorting through initial hypotheses from the outset. Any apparent uncertainty in their comments reflects both the complexity of the EP role, and the openness of the EPs in exploring professional dilemmas with the researcher. This openness in articulating these uncertainties in the interviews is welcomed, and it is suggested that their honesty provides a clear and accurate sense of the range of elusive and subtle factors which are fundamental to, and impact upon, EP practice on a daily basis.

4.5.3 Theme 1: Language



4.5.3.1 Language: The importance of language

Although this element of the study was not formalised within one of the research questions, the data have been included as this was a question in the initial interview, intended as a 'warm-up' and background item which subsequently yielded relevant information. The EPs' views are pertinent because they indicate their recognition of the importance of language and therefore, by inference, the importance to EP practice of the ability to identify potential difficulties. The EPs universally expressed their view of the fundamental importance of language to a child's development, discussing the two-way nature of communication and raising the issue of it being a 'means to communicate'. They recognised the need for modified, alternative or augmentative communication for some, and held the view that behaviour should be regarded as communication:

> *"Language is such a huge area it is a fundamental aspect of development - without language a child cannot understand and cannot learn. It's important across all areas of learning – I'm trying to think of where it would not be an issue? Maybe medical?" [EP: 0-4years] and similar from 8 other EPs*

Because all nine participant EPs in the initial interview made clear statements about this importance, it is argued that this clearly-held opinion should be viewed against the further data in the study: data relating to lack of confidence, to the role of others, and the occasional assumption that another professional group will be addressing this area of the child's needs.

4.5.3.2 Language: Language development

As the topic of the study relates to professional development one feature was to ask the EPs how they knew what typical language development was, the basis for this question being that knowledge of typical is necessary to know when development is not following a typical pathway or at a typical rate. When the EPs were asked 'How do you know what is age-appropriate for a child?' they were generally clear that they did know what typical language was, and their answers revealed a range of views and different levels of explanation:

> *"I have in my head what I'd expect from a 2- 3- 4- 5-year old." [EP: 11+ years].*

But for this EP, they apparently found it difficult to articulate how they knew this:

> *"Initially just get a feel from experience …something not being quite where it should be…" [EP: 5-10 years].*

and the role of increased experience did feature more explicitly in some comments:

> *"It's just based on knowledge and experience of child development – what you'd expect a child to do at that age." [EP: 5-10 years].*

However, a more recently-qualified EP indicated that this knowledge had been gained in the training course and commented candidly that:

> *"Well, at the start I reckoned I was pretty clued up with language; you know, just out of training! But when you asked me in the first interview 'How do you know what is typical language development?' Well I kept thinking about that because I don't know that many little children. So I have been thinking about that. I'm afraid I didn't come to any conclusion, but I did think about it. It really stayed with me, you know?" [EP: 0-4 years].*

4.5.3.3 Language: Language assessment

The EPs' comments about assessment broadly mirrored the wider debate between psychometric and non-psychometric assessment, and between ipsative and normative assessment approaches. The EPs seemed, in part, to derive their attitude to assessment from the

philosophical stance of their individual EP training course, but also from the Service where they had worked.

> *"In [XX EPS] it is dreadful to mention psychometric testing … they keep them hidden and locked and it's very much 'you don't use them', but people do use them, it's just that it's all done in whispers and, you know, a secret vice. It's frowned upon and yet in [YY EPS] everyone carries a BAS. You wouldn't go anywhere without one." [EP: 0-4 years].*

Three EPs indicated in the interview that they did not see assessment of language as being part of their role (see 5.4.5 Professional EP role). However, those who did want to explore language adopted a range of assessments through which there was a clear thread of hypothesis generation and hypothesis testing from the EPs, regardless of the type of assessment approach or assessment tool which they used:

> *"Well I do use assessments but I don't go straight for those … more of a hypothesis-testing …" [EP: 0-4 years].*
>
> *"I use the WPPSI with the little ones. I use some developmental checklists such as the P.I.P. charts and the Teaching Talking profile, but I am not using them for a centile score."[EP: 11+ years].*
>
> *"I nearly always do some one-to-one with a child - some observations - I use PCP (Personal Construct Psychology) quite a lot." [EP: 0-4 years].*
>
> *"[The assessment activity] was a good basis for hypothesis generation: it led to new hypotheses where I would not have asked those questions of staff to explore; very illuminating for the EP" [and similar 4 EPs]*
>
> *"With older children I use the verbal scales from the BAS and before it went out of date I used the WOLD, which I liked. […] I'm very wary of making judgements in the first session but, yes, I think that's good information …" [EP: 0-4 years].*

The EPs considered the importance of the social context for the child and the need for information to be gathered from a range of different communicative contexts and situations:

> *"… then there's the impact of the home environment, and I have quite a number of EAL children and that's a huge issue for assessing them." [EP: 5-10 years].*

and another EP also discussed the importance of a range of contexts, whilst also giving an indication of an assumption that language difficulties will already have been recognised:

> *"I try to see the child in a home and school setting, but if there's a language difficulty there they tend to be known to SLT." [EP: 0-4 years].*

More practical issues were also discussed as having an impact upon the EP's professional practice, and one EP represented the view (variously articulated by five others) that assessment needs to be conducted over time, although they tempered this with realism:

> *"Early Years is tricky as we just don't seem to have enough time to work out whether are we are looking at delayed patterns or are we looking at disordered. […] I just think for the Early Years it's very early to be really confident about what you think. Then there's the statutory timescale and pressures, when really, you want to wait and then see him in three months." [EP: 5-10 years].*

Many EPs were flexible in their approach to assessment and explained their use of assessment tools in a dynamic way. When asked what the EP used for assessment:

> *"I use formal standardised tests in a more dynamic way such as some of the Early Years BAS." [EP: 0-4 years]*

and

> *"WOLD, WIAT, Sentence Comprehension Test, CELF, Observation Checklist, but not really the BAS or the WISC. I use the others in a dynamic way - working memory and comprehension." [EP: 11+ years].*

Some EPs worked to the discrepancy model in assessing language, presumably as this reflects the assessment model for allocation of specialist resources in the County:

> *"The first thing I would do is a standardised assessment. You can dip into it, can make comparison when language is low and visual is high." [EP: 0-4 years].*

EPs also adopted a positive approach to assessment, commenting on the (implicit) importance of describing what a child **can** do, and using assessments in such a way as to achieve this:

> *"I have an expectation of what the child would do […] I always put the observations in a context, and I always focus upon strengths." [EP: 11+ years].*
>
> *"As well as looking for difficulties, it was definitely useful for a sense of what a child <u>can</u> do because it is open-ended, and not right-wrong, so I could say that the child: <u>can</u> sequence, <u>can</u> describe, <u>can</u> understand humour, <u>can</u> create short utterances." [EP: 0-4 years][+ 3 other EPs describing the task as positive].*

Only one EP referred to the child's views, although this may be a result of the structure of the interview, despite the intention of flexibility, which may not have provided the opportunity:

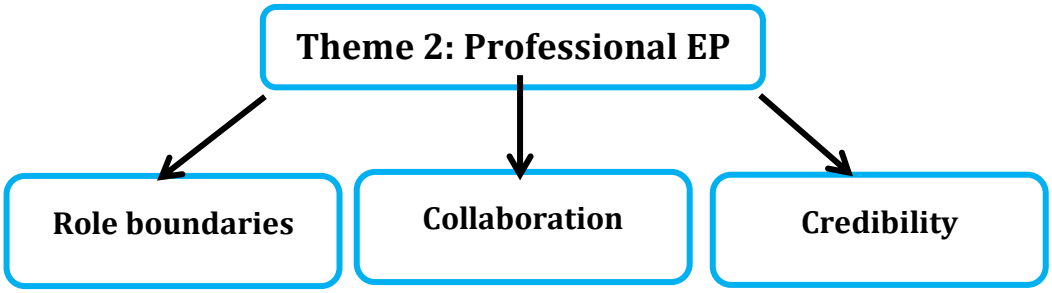
> *"I look at basic academic achievements and then other information emerges, for example their views, and I use cognitive scales or diagnostic scales - ways to look at what they like, are good at, where they need help." [EP: 0-4 years].*

One EP did offer their methods of assessment, but indicated that their assessment approach did not specifically include individual working with a child:

> *"I would more commonly go to verbal scales of the WISC or BAS but mostly it is consultation on language – receptive and expressive." [EP5: 5-10 years].*

which leads into the area of professional role and role boundaries.

4.5.4 Theme 2: Professional EP role



4.5.4.1 Professional EP role: Role boundaries

The EPs were respectful of colleagues and the EP role vis à vis that of others, primarily speech and language therapists, but also the specialist language teaching team:

> *"I think we split language off to the Speech & Language [specialist teaching] team or to speech and language therapists. It's about roles and functions in systems and the early impact on children." [EP: 5-10 years].*

EPs' comments may be a reflection of the perceived high quality local Speech and Language Therapy services, plus the effective collaborative working relationships which have built up over recent years:

> *"I don't use the TROG or anything like that because most schools have got good speech and language therapist involvement…" [EP: 0-4 years].*

However, the issues which can arise with other professional groups, and the (potential) conflict between differing contexts and models of assessment and intervention, were mentioned:

> *"There is pressure from other professionals e.g. SLT [speech and language therapy] to give a cognitive score and then this leads into discrepancy testing." [EP: 5-10 years].*

Three EPs indicated through their interview that they did not see assessment of language as being part of working with a child, one of whom stated this as:

> *"I don't really use anything specific. I did try the SaLT Narrative Test. I did a CELF once. I thought that was quite useful for that situation but I wasn't familiar enough with it to interpret it. I just don't see it as part of my role, to be assessing language, so it has never really arisen." [EP: 5-10 years].*

4.5.4.2 Professional EP role: Collaboration

None of the EPs referred to extensive collaboration or actual co-working with Speech and Language Therapists (SLTs), other than one comment on the use of the SLT's data as a source for the EP:

> *"I take the CELF scores from SLT …." [EP: 0-4 years].*

The EPs did also refer on to Speech and Language; however, in this case, it seems to be the result of an absence of the EP's methods to assess language, rather than a positive action:

> *"I suppose I'm a bit stuck in 'using the BAS' and 'referring to SLT' and I'm not particularly comfortable with other methods of doing it." [EP: 0-4 years].*

One EP did give an example of making contact with the speech and language therapist, but the extent of the contact is not clear. Its inclusion here is to illustrate some contact between EP and SLT, which could arguably be seen as the seeds of collaboration:

> *"I have an interest in drawing on others' data so that's Teaching Talking and asking other professionals e.g. SLT or the [specialist teaching] team." [EP: 5-10 years].*

Several EPs referred to the activity clarifying their thoughts and contributing to more positive feedback and planning discussions with teachers. The essence of this comment serves to illustrate the dynamic inter-relationship between the themes, where the use of the narrative activity had enhanced the EP's thinking about the child and (arguably and by implication) their credibility, thereby facilitating a more fruitful collaboration:

> *"It made me feel clearer about trying to make sense of a little boy who was really puzzling. And it made sense to the teacher too, and they also felt that their views – and their – judgement had been respected, almost. It definitely made me feel more confident. I just felt like I knew what I was doing." [EP: 11+years].*

even for a very experienced EP:

> *"It gave a good basis for discussion with the teacher. I had one child - the story, it was so disjointed. At first I was thinking whether I had explained it properly, was it down to me? … That really surprised me - and by this stage of being an EP I have seen hundreds of children, but not seen it like that before. That was the sort of thing that got me wanting to use it more." [EP: 11+ years].*

and one EP described the impact the activity and feedback had with parents:

> *"I used it with one child with massive language processing difficulties, and I re-did the story [with the child] with about 2 terms between. It was a good indicator of development which I fed it back to the parents, and this was something that seemed to have some real meaning to them. It felt really good - not just standardised scores, you know?" [EP: 11+years].*

Some of the EPs found that the process of sharing with the teacher their observations of the child's response to the activity led to the teacher suggesting an action plan which reflected the complexities of a child. As this type of activity could be argued to be central to the EP casework role, two extended quotes are also provided to illustrate fully this process and the sense that the EP had felt that the collaboration had been mutually valuable:

> *"Well, it all [using the assessment] made me think: I wonder about Attachment for this little boy. He had poor concentration, needed to be in control, got upset and so on and the school had thought ASD. So I talked all of this over with the teacher and she gave me some other information about him and his family, and she said that she felt this [Attachment] was a different way of looking at him, and she thought it fitted better. So it made me feel really pleased. Satisfied. It was a good basis for that discussion. And the teacher just 'got it', you know? She got it. So of course I felt better about that whole process too." [EP: 0-4 years].*

> *"One of my schools thought ASD for a child as they saw social communication aspects, and poor comprehension. I used the Frog and this was what was really interesting, and I was really really surprised. It was totally disjointed. It was so incoherent, but he 'read' it i.e. re-told it with such an expressive voice, so his parents weren't worried at all. These superficial skills hid this vast issue. So between us, with the teacher, we thought that he had such a disjointed way of understanding things and we didn't think it was lack of experience of stories, that we talked about that in relation to his maths – if he told the story in such a disjointed way maybe he was also like that with the curriculum - with maths, you know? And she said it made sense to her and she had loads of good ideas about how to – well - guide him through with more steps in the process. So it took us down a path we hadn't really expected and, you know, it just made sense. The teacher started thinking about other things and you could see it had really set her thinking about other occasions; you could see that little things about him were making sense now, and she had a framework, a way of understanding him, and she was such a good teacher you just knew she was going to be the right person to help him." [EP: 5-10 years].*

4.5.4.3 Professional EP role: Credibility

This theme relates to the way in which the EP reflected on how they felt their work and their role were viewed by others. A majority of the EPs expressed positive views on the value of the additional knowledge about language, the use of the assessment activity and how that impacted upon their discussion with others. These two features seemed to provide them with a clarity and structure, and their descriptions of the impact reflected their sense of providing a structured 'certainty' within the bounds of their professional caution about being 'too certain':

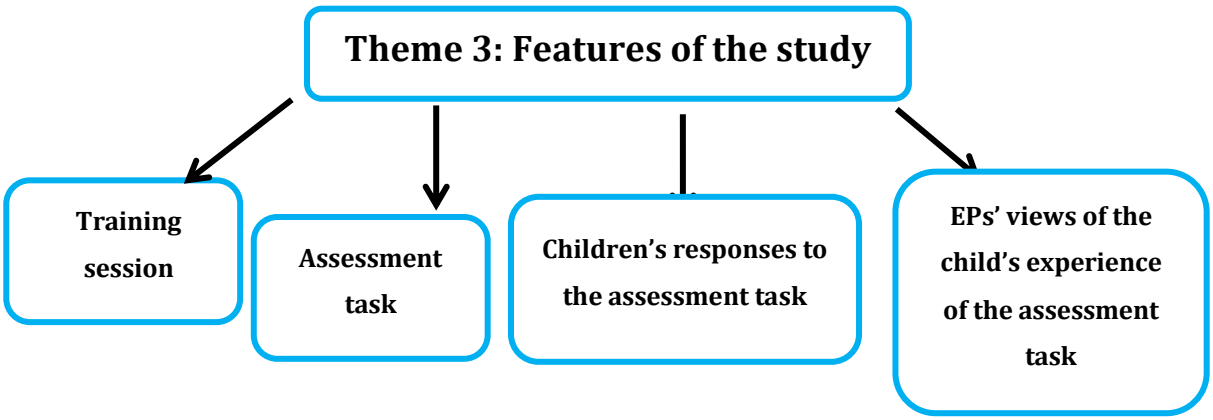
> *"I felt like I had made a huge shift in how the school understood him. It just felt like a good morning's work. And I'm pretty sure they were really pleased too." [EP: 5-10 years].*

> *"It definitely made me feel more confident. I just felt like I knew what I was doing, that it began to have a predictability about it, so that I was already building up a bank, almost, of things I might expect to see in the child; and it verified things I had noticed anyway in some children, which I think is really useful in itself as another angle on general observation." [EP: 5-10 years].*

An extended quote from a reflective and very experienced EP captures the essence of *credibility* for this colleague:

> *"One of the things about all this … and I had been thinking about it recently anyway … You know that EPs…well we are proud not to have certainties, aren't we? We tend not to say "It is this…" because we know all the things that can be happening or have happened for a child … and any or all of that could be having an impact. […] But I've been thinking […] I just wonder what others - teachers, parents, SLTs think about us - do we look professional or do we look like wishy-washy fence-sitters? Do we come across as not really knowing what we are talking about? I don't know the answer to this, but I certainly felt that this process [the study] gave me a basis to continue to hold all those uncertainties, all those hypothetical strands - but with firmer foundations, if you know what I mean…?!" [EP: 11+ years].*

4.5.5 Theme 3: Features of the study



4.5.5.1 Features of the study: Training session

The EPs stated their appreciation of the language information element of the session, whether they were new to this role:

> *"I don't really think we did much on the actual mechanics of language in training. And I have to say it's a while since my undergraduate psychology degree [….] anyway, I thought it was really interesting and then when I met [a little boy] I was so pleased that I could actually see some of those features and I began to think …ah! So that's what it's like … And then I felt … you know … I know what I'm going to investigate …" [EP: 0-4 years].*

or well-experienced:

> *"I still see language as really important but I think that after the training we had [as part of the study] I was much more aware of the areas to be looking at, so it helped me thinking about it and how to organise it better. It sort of brought it to the front." [EP: 5-10 years].*

4.5.5.2 Features of the study: Assessment task

The EPs held many positive views on a range of aspects of the assessment activity, and these lend themselves most readily to a bulleted list:

Practical aspects of the activity:

- easily portable and convenient
- the layout of the record form
- the flexible and open-ended guidelines
- a very useful starting point [5 EPs]

In using the activity for assessment:

- a very natural activity for an adult to share a book with a child and a good compromise between informally looking at the child's reading book and the full formal assessment approach giving a good initial 'flavour' of the child [5 EPs]
- a good basis for hypothesis generation [4 EPs]
- the structure and the standard format across the series of books: useful for re-use at a later date [2 EPs]
- quick, efficient, economic and succinct activity [4 EPs]
- provides basis for feedback and discussion with staff and parents [2 EPs]
- assisted in target-setting process - it gave a clear focus for targets with greater progression – previously not had them in mind as targets [3 EPs]

In direct relation to the focus of the study [8 EPs]:

- gave confidence in what the EP was doing and why
- confidence in this area alongside other professional groups
- confidence in thinking dynamically
- enhanced confidence in the discussion of observations with colleagues in school
- it led to wider use of more open questions to staff because it increased confidence in speech and language
- a very positive task - useful for a sense of what the child can do

- a good basis for Dynamic Assessment
- beginning to build up a 'bank' of expectation of how a child would approach the task
- a good basis for understanding emotional vocabulary and understanding

and in summary:

> *"[Using the Frog Story] generated hypotheses that I would not have considered. So with that and [the study] … it all gave me a clear route to … you know … a really sound basis for my opinion of the child - it just gave me a better understanding. That meant that I could go into a discussion with anyone really - parents, teachers, other professionals [SLT] and feel like - and look like!! - I knew what I was doing." [EP: 0-4 years].*

The EPs' concerns about the assessment task primarily related to the style of the book: that it was old-fashioned, lacked colour, and was limited in its cultural significance:

> *"I was surprised that the children liked it as much as they seemed to. After all, the pictures are not very inspiring and I don't think they're very clear either, but I like the standard format across the titles - the same elements really." [EP: 5-10 years].*

and one EP suggested that there was a risk

> *"… of making too broad a generalisation from this activity to how the child talks generally." [EP: 5-10 years].*

4.5.5.3 Features of the study: Children's response to the task

The EPs carried their concern about the rather dated style of the book into their views of how the child would feel about it. Most EPs found that their concerns appeared to be unfounded, despite the unexpected nature of the children's responses:

> *"I found myself wanting to apologise to the children! Well, I didn't, but, you know? Anyway, they didn't seem to notice that much. That made me think about the whole issue of adults – going into schools, meeting children, and I was thinking about, well maybe they just accept what's put in front of them; not one child said anything like, you know, That's a rubbish book! Well I'm exaggerating, but they were pretty compliant really, cooperative. Lovely really." [EP: 5-10 years].*

4.5.5.4 Features of the study: EPs' views of the child's experience of the assessment task

The EPs brought a child-centred approach to the study and it was apparent that they were reviewing the assessment activity from the child's perspective, even though this had not been requested by the researcher. Generally their comments were concerns about the style of the Frog Story books: that they were old-fashioned, American, lacked colour and, in terms of validity

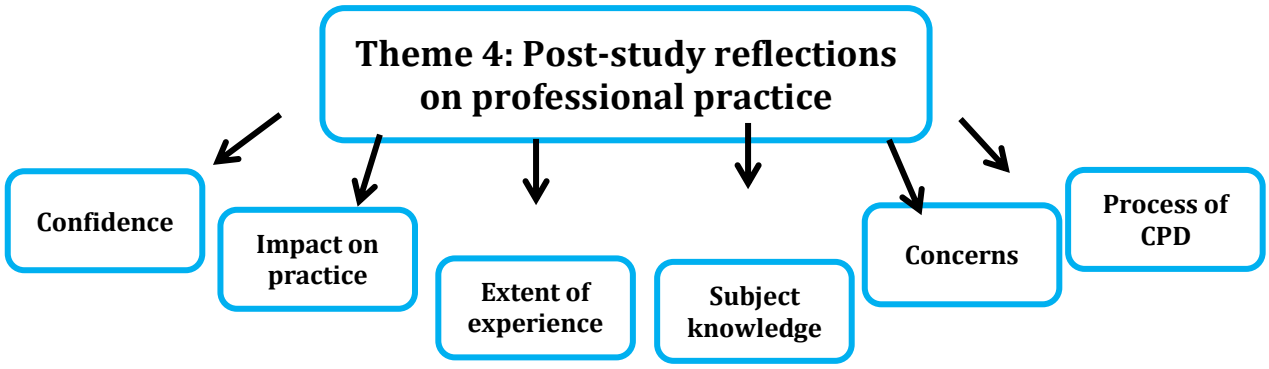
of the book for this use, several EPs considered bias and the potential impact on the data derived. One EP noted:

> *"Culturally it is quite 50s and a monoethnic group of children in the stories. It's a bit Winnie-the-Pooh style [...] pretty old-fashioned; I don't think I would have been interested in it as a child." EP: 5-10 years].*

However, the EPs' concerns having been noted, they also countered with a range of positives from the child's perspective, regarding the activity as being 'non-invasive' and especially including their view that :

> *"For the child, it's a very familiar activity for an adult and child ... to look at a book together."[EP: 5-10 years].*

4.5.6 Theme 4: Post-study reflections on professional practice



4.5.6.1 Post-study reflections on professional practice: Confidence

The EPs were almost universally positive about the impact of the study in terms of confidence, which they explained in a variety of ways:

> *"I felt it made a big difference to me in terms of my practice and I certainly feel more confident about the whole area. And the assessment - it was nice and low-key, not a BAS or a WISC yet I felt it gave me pretty good information..." [EP: 11+ years].*

> *"It definitely made me feel more confident. I just felt like I knew what I was doing, that it began to have a predictability about it, so that I was already building up a bank, almost, of things I might expect to see in the child; and it verified things I had noticed anyway in some children, which I think is really useful in itself as another angle on general observation." [EP: 11+ years].*

and one EP tempered their enthusiasm with the reality of the complexity of the EP role:

> *"Well! That's as much about how confident do we ever feel, as EPs! We're pulling together so many strands and trying to make the best sense of them, and I think it is also so varied that it would be really hard to say with any confidence!" [EP: 5-10 years].*

Confidence was the key feature in the current study, as being a construct which could be captured through the EPs' views and comments. However, the confidence elements were seen across a number of areas in the interviews which are highlighted below.

When asked post-study about *confidence*, and despite the researcher having previously asserted that it would be unwise to make a causal link between *confidence* and *competence*, one very experienced EP did make this link by noting:

> *"Well this is my area really, so the main thing for me was that I was interested by the activity and having the opportunity to have a different, well slightly different, way of working with a child. But it didn't affect my confidence, though I suppose it may have, but actually it probably has affected my competence, with having a wider set of things to draw on. [EP: 11+ years].*

4.5.6.2 Post-study reflections on professional practice: Impact on practice

At the end of the study one EP explained that the training session on language had been useful, despite *Language* already being an area of considerable experience, and commented:

> *"I still see language as really important but I think that after the training we had [as part of the study] I was much more aware of the areas to be looking at, so it helped me thinking about it and how to organise it better. It sort of brought it to the front." [EP: 11+ years].*

EPs commented upon the impact of the study across a number of areas of their practice. One was from an EP thinking about using the task in a specific way:

> *"…so it's made me more interested in, and more confident in thinking more dynamically…" [EP: 5-10 years]*

while the second considered the issue of language needs impacting on a specific group:

> *"It made me think more about language with the SEBD population." [EP: 5-10 years].*

The EPs were asked whether the study had changed their practice:

> *"Yes you know I think it has! After all these years! I really liked the way it was a halfway between looking at a reading book and getting the whole kit out. It was useful as a quick screen as well as a warm-up." [EP: 11+ years].*
>
> *"As I'm thinking about it, I think that the standardised scores do reify the difficulties, you know? [R: is that a good thing or a bad thing?] Well there are biases in standardisation, not just EAL, there are cultural biases like poor whites. So it's made me more interested in, and more confident in thinking more dynamically." [EP: 5-10 years]*

and whether they would use the study's assessment activity again:

> *"I will definitely keep using it. It was interesting to do for the study - very much so – but I'll definitely use it again. I thought it was very useful. I think I was a bit wedded to the standardised stuff and that maybe because I was in a different role until recently, but I*

certainly feel more confident about judgements, just using something that you can build up, a sort of picture of what you might expect [when using the same task]." [EP: 11+ years].

4.5.6.3 Post-study reflections on professional practice: Extent of experience as an EP

The study had aimed to consider experience as a relevant factor, but there were so many additional variables, and only a small sample of EPs, that any conclusions drawn would not be secure. However, this quote from a very experienced EP gives a sense of increased clarity and a recognition that the role is a complex one,

"Well because I know what I'm looking for I do feel reasonably confident about conclusions. Well! They are initial conclusions at the start, of course!! But then it depends on how complex the child is, really." [EP: 11+ years].

4.5.6.4 Post-study reflections on professional practice: Subject knowledge

The training session was an element of the study applied to ensure that all the participants had at least a basic understanding of the area of language development and potential difficulties. It should be noted that a number of the EPs had very high levels of experience already in this area. One EP noted that:

"Well I did know all about language, but what it did was it brought it to the fore, and I found that really useful. It reminded me to have it at the front of my mind." [EP: 11+ years].

4.5.6.5 Post-study reflections on professional practice: Concerns

The most clearly articulated concern came from an EP whose preferred style of working was within a consultation model and the individual assessment approach was not congruent with this. In response to the question 'Would you use the assessment task again…?':

"I don't know really - I'm not sure. I mostly work in a consultation model so I probably won't get much chance, and I felt it raised so many questions so I think I'd be cautious about it really." [EP: 5-10 years].

4.5.6.6 Post-study reflections on professional practice: The process of CPD

The value of the sharing of ideas in the group discussion was noted (DuFour, 2004 and Earl & Katz, 2002):

"[I felt not only] more confident through using the tool but also through having the discussion with colleagues and sharing the observations in the group around the activity and participating with other EPs. Professional reflection needs to be prompted by something external like this." [EP: 0-4 years].

There was further value expressed in the more informal sharing of ideas:

> *"The talking with the other EPs [colleagues in the same office working with the study and the group discussion] I thought that was very illuminating. The whole process of what you do know – both as a way of developing practice and with the Frog tool. When we looked at what each had done, and then we were thinking about whether there were alternative prompts based on listening to the others' feedback. Really useful." [EP: 5-10 years].*

Comments also related tangentially to Guskey's work which argued that it is not CPD per se, but the observation of the positive benefit on others (Guskey 2002). The EPs commented on how their increased confidence gave them more confidence to explore different areas of questioning:

> *"... it led to new hypotheses where I would not have asked those questions of staff to explore; very illuminating for the EP." [EP: 0-4 years].*

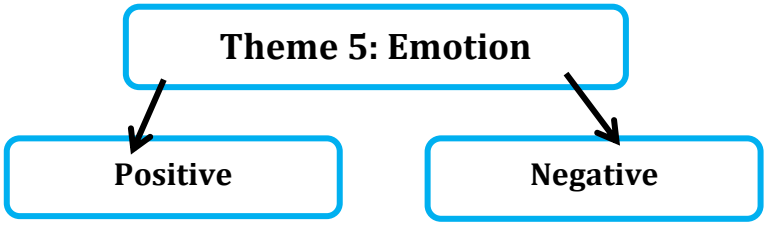
and

> *"When I'd had that really useful discussion with the teacher - the one where you just knew she had 'got it'? Well, that made me realise how powerful such a little thing as looking at the little book of frogs could be. That was a big surprise!" [EP: 5-10 years].*

The EPs reflected continually upon their own professional practice and upon the wider issues in psychology throughout the interviews:

> *"If an EP engages with something new [i.e. this task] then it does have an impact on your understanding of that area – it stimulates those questions – brings you back to questioning: Why you do what you do." [EP: 0-4 years].*

4.5.7 Theme 5: Emotion



4.5.7.1 Positive

The EPs' comments were overwhelmingly positive in terms of how they viewed their own practice, how it assisted them in working with others, and how they felt others viewed them as practitioners:

> *"It just felt like a good morning's work. And I'm pretty sure they were really pleased too." [EP: 5-10 years].*
>
> *"It felt really good - not just standardised scores, you know?" [EP: 11+years].*

4.5.7.2 Negative

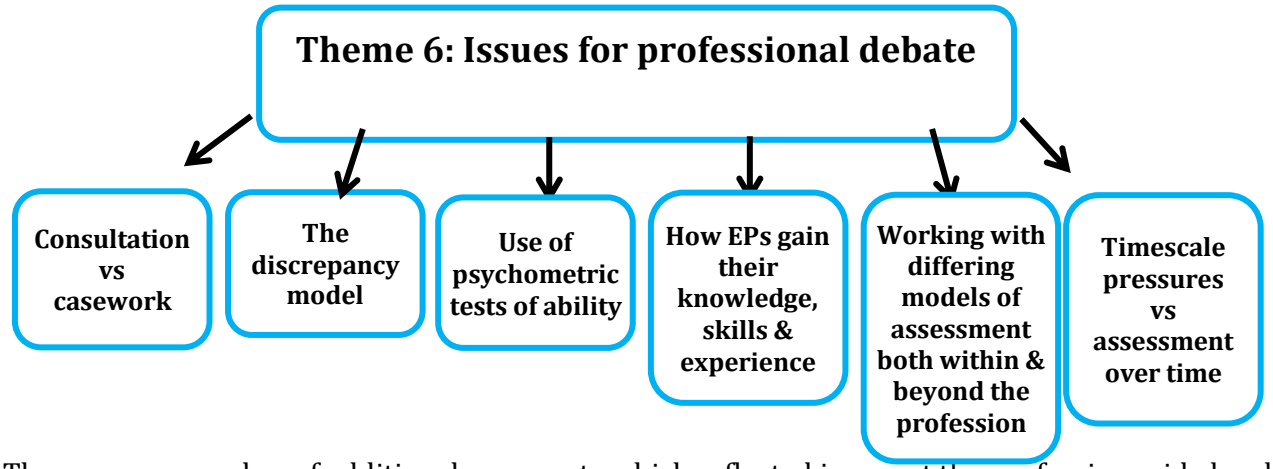
An unintended and disappointing consequence for one EP was the reduction in their confidence: their comments reflect their professionalism, whilst simultaneously illustrating the potential issues for someone who has taken a break and is returning to the EP role:

> *"Well! I feel it showed me what I didn't know … so that was a bit of a shock, actually … part of it is coming back from leave and trying to pick up all the threads and … well … I had been pretty relaxed about this area … but now …well… it's set me thinking … mustn't let it knock me back too much though…onwards and upwards!!"*

and, by inference, another negative impact comment:

> *"Well, I think I need to look at different assessments. I'm a bit stuck in using the BAS and referring on to Speech and Language…my opinion of me has probably gone down without thinking about it." [EP: 0-4 years].*

4.5.8 Theme 6: Issues for professional debate



There were a number of additional comments which reflected issues at the profession-wide level and some quotes to capture these are included here.

4.5.8.1 Consultation vs casework

Several EPs debated the issues of how to deliver the most appropriate EP service to schools, children and families:

> *"An interesting issue for EP practice: the difference between consultation and direct contact with children, and what we gain from actually spending time with the child. I*

usually work to a consultation model but - though this is hard to say - I do think the teacher really appreciated me working with the child" [EP: 5-10 years].

4.5.8.2 The discrepancy model

Some EPs worked to the discrepancy model:

"The first thing I would do is a standardised assessment. You can dip into it, can make comparison when language is low and visual is high." [EP: 0-4 years - previously quoted in Language: Language assessment].

while others felt a degree of pressure from other professional groups to provide cognitive ability normative scores, thereby implying that this would not be their preferred method of working:

"There is pressure from other professionals (e.g. SLT) to give a cognitive score and then this leads into discrepancy testing. Frog Stories gave greater confidence not to be pressured into this." [EP: 5-10 years - previously quoted in Role boundaries].

4.5.8.3 Use of psychometric tests of ability

The dilemma of whether or not to use psychometrics was encapsulated by:

"In [XX EPS] it is dreadful to mention psychometric testing … they keep them hidden and locked and it's very much 'you don't use them', but people do use them, it's just that it's all done in whispers and, you know, a secret vice. It's frowned upon and yet in [YY EPS] everyone carries a BAS. You wouldn't go anywhere without one." [EP: 0-4 years - previously quoted in Language: Language assessment].

4.5.8.4 How EPs gain their skills, knowledge and experience

Once again the small sample size makes generalisation flawed; however, the source of EPs' knowledge and experience is an important one, as these are, arguably, foundations for effective practice. Although it was not quantified, there was a sense that the EPs who had close contact with young children within the family appeared to have a greater understanding of child development than that which resided solely within professional education and training. One EP was candid in their comments about this:

"Well, at the start I reckoned I was pretty clued up with language; you know, just out of training! But when you asked me in the first interview 'How do you know what is typical language development?' Well I kept thinking about that because I don't know that many little children. So I have been thinking about that. I'm afraid I didn't come to any conclusion, but I did think about it. It really stayed with me, you know?" [EP: 0-4 years - previously quoted in Language: Language development].

4.5.8.5 Working with differing models of needs and assessment - within and beyond the profession

This topic incorporates the issue of how to work effectively with professionals who apply differing models of assessment of a child (e.g. the medical model), and how to balance the debate between the normative against the ipsative approach, and the range of EP professional practice philosophies of differing EPSs.

Within the profession:

> *"In [XX EPS] it is dreadful to mention psychometric testing … they keep them hidden and locked and it's very much 'you don't use them', but people do use them, it's just that it's all done in whispers and, you know, a secret vice. It's frowned upon and yet in [YY EPS] everyone carries a BAS. You wouldn't go anywhere without one." [EP: 0-4 years - previously quoted in Language: Language assessment].[EP: 0-4 years]*

Beyond the profession, in working with other professional groups, and as Dunsmuir et al. had noted, these tensions need to be explored and clarified to enhance effective co-working or collaboration. (Dunsmuir, Clifford & Took, 2006):

> *"There is pressure from other professionals to give a cognitive score and then this leads into discrepancy testing." [EP: 5-10 years]*

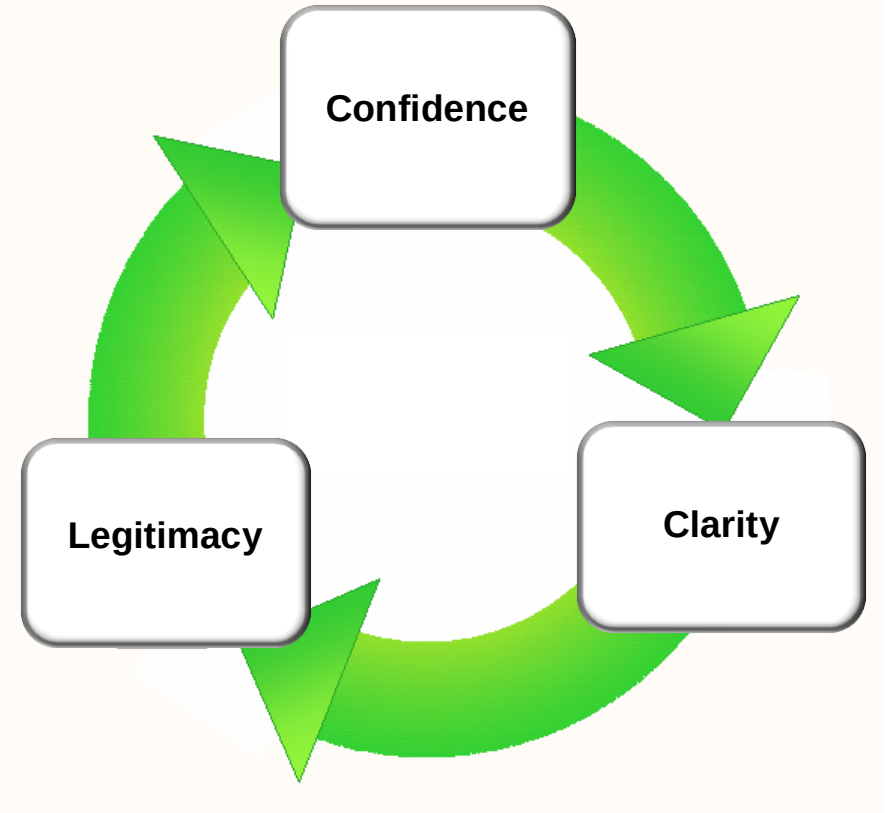
4.5.8.6 Timescale pressures vs assessment over time

The good practice of assessment over time was mentioned by several EPs who recognised that there was a 'management of reality' need to balance best practice with other pressures, including statutory timescales and, more recently, pressure from the traded perspective, where practice may be vulnerable to influence by the client or purchaser.

4.5.9 Super themes

As explained, the process of thematic analysis was an extremely active and iterative one, and, throughout the sorting and categorising, there was an emerging presence of three super themes. However, the continued process of sorting under their headings did not arrive at clear categorical distinctions or separation. Nevertheless, these super themes remained as possibilities to the researcher and are included here in full recognition that they are diffuse and permeate throughout the themes and sub-themes. These super themes - *Legitimacy*, *Clarity* and *Confidence* - relate to an overarching view emerging from the data which could not be captured or reified in the analytic process, yet each of the three could also relate to the individual themes. Despite the absence of a legitimate analytic process for their creation, a brief explanation of the sense of each is included to contribute to a more complete reflection of the analytic process and the richness of the data.

Figure 21. A figurative representation of the dynamic relationship between the three super themes



4.5.9.1 Super theme - Legitimacy

This is the title selected to reflect the quality of debate which EPs in the individual interviews had with themselves, and with the researcher, as they took an overview of the whole study process. They talked about the issue of some assessment practices being done almost in secret, and particular styles of assessment (especially psychometric assessment of ability) being 'frowned upon'. However, the idea of *Legitimacy* went further than assessment practice: it was also evident in the manner in which EPs talked about the enhancement to their confidence in talking with parents, staff and other professionals, as a result of having the structure of the Frog Story assessment activity as a basis for their hypothesis-generation.

This theme title was employed to capture the EPs' views which were grouped at a meta-level i.e. the EPs' perception of their role within the wider context of the child and education and, in complementary fashion, how the EPs felt they themselves and their professional role to be viewed by others:

> *"I think that having the structure of the Frog Story task, well it felt like a more legitimate, a more credible basis to talk through some ideas with the teacher." [EP: 5-10 years].*

4.5.9.2 Super theme - Clarity

The researcher suggests that *Clarity* is the most appropriate term for this super theme, being the result of an absence or removal of *ambiguity*. It could be argued that this is a theme which reflects a feature of the EP profession, where there are profession-wide debates about, for example, the uniqueness of the EP contribution, or the dichotomy of views on assessment approaches and purpose of normative scores. A previous title had been *certainty,* but this was discarded because the researcher argues that certainty is an unrealistic goal within the practice of the EP. It is also, again arguably, suggested that absence of *certainty* can be a key element in the approach that an EP takes, being a result of the EP's process of considering a range of contributory factors to the situation presented. Therefore, this theme also encompasses *absence of certainty* inasmuch as the EP may not deal with certainties but with hypotheses and the testing of those:

> *"Maybe we [EPs] never draw conclusions, maybe we just have hypotheses?!" [EP: 0-4 years].*

4.5.9.3 Super theme - Confidence

As argued previously the three themes have a dynamic relationship, with each impacting upon the other and each being contingent upon, and the result of experiences which sit within the other two themes. For example, an increase in confidence then has a reciprocal impact in enhancing both *Legitimacy* and *Clarity* - a process which could arguably be linked to the Matthew Effect (Merton 1968).

> *"Frog Story helped me to get to a more critical point of issues resting on standardised scores – made me more aware in terms of how the process acts as a simplification, where standardised information reifies the score. Not just in EAL but in other situations too." [EP: 5-10 years].*

4.6 SUMMARY OF RESULTS

As the study employed a mixed methods design, both quantitative and qualitative data were generated. Research Question 1. was based upon quantitative data, while Research Questions 2. & 3. were explored through both quantitative and qualitative data. The results presented in this chapter are both the graphical and tabular presentation of the quantitative data, and the complete thematic analysis of the qualitative interview data.

This Results chapter supports the initial observation that the participant EPs have some issues of confidence in understanding and assessing children's language development, and the

range of possible factors relating to this observation will be discussed in Chapter 5 ~ Discussion. Furthermore, the full thematic analysis of the qualitative data provides support for both research question 2. and 3., and the analysis resulted in a range of themes which extended beyond the scope of the specific research questions. The issues and points arising from the survey, the interviews, the group discussion and the application of the Frog Story task and are discussed in Chapter 5.

Furthermore, the quantitative data appear to provide a clear rationale for the areas under exploration:

- Only 14 of the 20 (70%) EPs involved in the initial information-gathering questionnaire marked *extremely confident* (6) or the next level of confidence - 5 in their knowledge of children's language development.
- A **minority** of the EPs do feel under-confident, to varying degrees, in their knowledge of the area of language and communication, yet a **majority** of EPs express a wish (with the underlying assumption that this is driven by a need) to enhance their skills in this area.
- A **majority** of the EPs involved with the second part of the study see *language* as being fundamental to a child's needs and progress, and consider that it may often be a component in other presenting needs when working with or for a child causing concern, however they did not necessarily see it as their role to explore it
- The participant EPs in the second part of the study judged the specific assessment approach - the Frog Story assessment task - to be extremely successful in deriving a more confident and thorough understanding of the potential complexities of a child and their progress.
- Confidence in practice does have some relationship to extent of practice, with confidence generally, but not always increasing with years' practice
- The training session, the specific assessment activity, and the associated discussion with the researcher and with colleagues were all considered by the participant EPs to have an additional and significant positive impact upon their practice in this area.

CHAPTER 5 ~ DISCUSSION

5.1 INTRODUCTION

In this chapter the discussion of the findings is considered with regard to the literature review and presented in the following sequence:

- A summary of the issues relating to the construct of *confidence* being the area for exploration in the study [5.2]
- An acknowledgement of the issues relating to data collection [5.3]
- A summary of the considerations arising during the thematic analysis process and the rationale for the selection of themes [5.4]
- An explication of the thematic analysis process and the themes derived [5.4.1.]
- A visual map of the themes and sub-themes generated through thematic analysis [5.4.2]
- Definitions of the themes and subthemes [5.4.4, 5.4.5, 5.4.6, 5.4.7, 5.4.8, 5.4.9]
- A figurative presentation of three super themes [5.4.10]
- With regard to each research question, a consideration of the quantitative and qualitative data as relevant to the question, relating the findings to the literature review and identifying strengths and weaknesses where relevant [5.5, 5.6, 5.7]
- The key findings from the study's results [5.8]
- Additional comments, issues and unanswered questions [5.9]
- Suggestions for an Educational Psychology Service [5.10]
- Observations and reflections on the study [5.11]

5.2 USING THE CONSTRUCT OF *CONFIDENCE*

The current study has been conducted in the full recognition that a professional's *confidence* in their practice cannot, with any certainty, be extrapolated to provide a view on their professional competence. However, this construct was intentionally selected whilst also acknowledging that it would not be possible to capture an individual educational psychologist's (EP's) *competence* with any degree of certainty within the scope of this study. The literature review has highlighted the unclear nature of these concepts and their use, with additional caveats relating to the use of self-report and its relation to practice.

However, when the EPs provided a self-rating of their confidence in the area of language assessment this did provide a basis for quantification of any change in their confidence from before to after the period of the study, albeit without the capacity to triangulate against professional practice. The study was underpinned by the broad yet cautious view that increase

in confidence could lend a degree of support and lead into enhanced competence, in part through EPs' greater willingness to explore this area of a child's development, and thereby illustrating some of the principles of the Matthew Effect (Merton, 1968).

5.3 COMMENTS ON DATA COLLECTION

The questionnaire items were designed to provide a 'snapshot' overview and general indicator of EPs' views on the topic of assessment of children's language: the researcher suggests that the EPs' questionnaire responses should be viewed in the light of the potential limitations for EPs in the requirement for them to provide a minimal response. As a professional group, EPs are trained to take account of the range of contributing factors and differing contexts within which a referral is made; therefore a simple Yes or No or scaling response does not provide them with the opportunity to factor in the many 'Yes but …' and 'Yes, if …' and 'It depends …' thoughts which they would have in real world referrals.

A further potential issue for EPs' responses to the questionnaire and the individual interview questions could relate to a caution or reluctance to discuss possible areas of limitation or lack of confidence, either with the researcher or through having regard for the potential audience for the study; a further caution is the recognition of possible bias towards agreement with or pleasing the colleague researcher.

5.4 COMMENTS ON THEMATIC ANALYSIS OF DATA

The impact of the interpretivist element of thematic analysis (Braun and Clarke, 2006) was evident throughout the analytic process, and the researcher advises that the selection of the sub-themes, themes and three latent super themes should be seen in the context of the process of discarding numerous other candidates for these roles before this final selection. The order in which they are presented should not imply any hierarchy or ranking of importance.

Themes have been selected at a categorical level, with the sub-themes and their associated examples being comments reflecting the views, direct behaviours and actions described by the participants in the study. An example of the process of selecting the initial codes is provided (Appendix O); the progressive refinements of individual themes and sub-themes, and the process of extracting the most appropriate super themes was continuous, conducted through the manual sorting and re-sorting of numerous post-it notes (Appendix P). The themes and sub-themes are presented in a visual map, with a further figurative representation to illustrate the relationship between the three latent super themes. This is followed by samples of comments which have

contributed to the construction of the themes and sub-themes. These sub-themes could arguably have been broken down further, but when this was attempted the process resulted in individual units so small and unconnected to other units that they were becoming meaningless in terms of an analytic process (Arthur et al., 2012).

5.5 RESEARCH QUESTION 1.

RQ 1a.	*What are EPs' perceptions of, confidence in, and approach to exploring children's language development and its assessment?*
RQ 1b.	*Does the EPs' confidence in this area reflect their length of service?*
Source	Data (A): : EPS whole-service questionnaire survey [N]=20 Data (B: pre-) Participant EPs' self-rating in initial interview [N]=9 Data (B: pre-) Participant EPs' responses in initial interview [N]=9

5.5.1 Introduction

The primary source of the majority of data for RQ1 is the questionnaire completed by most members of the EPS, plus the self-rating scores of the participant EPs in the individual interview with the researcher; both providing quantitative data. The results for RQ1 are discussed by the questionnaire's individual question areas, and the qualitative elements from the interview between the researcher and the participant EPs are included as quotes where relevant.

5.5.2 RQ1. Language as a component in a range of presenting needs

To reiterate, the data for this question were derived from a questionnaire which permitted minimal responses. EPs appeared to become clearer about when they would and would not consider language as part of a presenting need, as they increased in experience (see *Figures 4i and 4ii*). It could be argued that this either relates to the advantage of having seen many more children or, conversely, to the more newly-qualified EP having had their training experience more recently, and being aware of the range of topics taught. An additional factor to be considered is whether the change in training model from the Diploma, through Masters level, to Doctoral training has had an effect. However, the relative impact of these factors has not been explored in the study.

The initial question's wording asked whether language was a major factor to explore: it is suggested that a differently-worded question - one which removed the idea of a 'major' factor - may have revealed different patterns. However, different wording had been considered and discounted at the time of construction, on the basis that a more general question may have

produced data which less readily demonstrated any emerging trends. Not only that but the question was asking EPs to consider whether the language was a major factor to explore but not whether it was necessarily a major component within that area of learning need. The researcher had anticipated that a high percentage of the EPs would consider language to be a major factor to explore in literacy; this was borne out by the responses, where 60% said it was *definitely* a factor and 30% said it was *probably* a factor. In ASD similar percentages of EPs thought language was *definitely* (50%) and *probably* (35%) a major factor. However, if the concept of *communication* as opposed to *language* alone had been the question it may be that all EPs would have included this.

The EPs' views on the contribution of Language with regard to two further 'categories' of learning need - Attention & Concentration (40% said *definitely* a major factor to explore, and 30% said *probably*) and Behaviour issues (40% said *definitely* and 20% said *probably*) - suggest that they may not be fully conversant with the literature showing the higher proportion of language issues (e.g. language processing, comprehension) in individuals with these primary difficulties. (ICAN website, Adamson-Macedo, Patel & Sallah, 2009 and Cross (2011). With the drive for evidence-based practice, further knowledge of the relevant research studies would further inform EPs of this pattern of difficulties.

Although language difficulties as a component in Numeracy appears to be less widely-researched in the literature, the researcher suggests that the low response to this as an area for exploration of language is unexpected (only 30% say it is *definitely* a factor to explore and 15% said *probably*), since Numeracy requires an understanding of many language-based concepts.

5.5.3 RQ1. Whether EPs consider language difficulties can be masked

The impact of the extent of professional experience is a clearly evident trend in the pattern of responses to whether or not a child may have language difficulties which could be masked by a superficial competence such that a parent or teacher may not recognise them: for the EPs grouped by 6-15 years' and 16+ years' experience, 100% agreed that language difficulties could *definitely* be masked.

For the Trainee EP group and the 1-5 years' experience groups their views were more variable, thereby skewing the overall percentage results *(Figures 11i & 11ii*). However, their views have not been removed from the overall data presentation, as it is important to acknowledge that the Trainee EP group bring with them a wide range of relevant experience, some of which may relate very closely to the areas explored in the current study.

In overall terms 70% of EPs held the view that language difficulties could *definitely* be masked and therefore present and undetected (*Figures 11i & 11ii*), (Gross, 2011, Cohen, Barwick,

Horodezky, Vallance, & Im, 1998). However, when these results are compared with the percentage of EPs who had responded on whether or not they would explore a child's language (*Figures 9i & 9ii*) this is not reflected across the area of learning need, other than the most readily-evident areas for language to be a component i.e. Literacy and ASD. This may reflect the fact that EPs seem to defer to their colleague professional speech and language therapists. The basis of this study is that the EP is well-placed to identify any early issues, particularly those which are a component of a more-evident need, in order to consider referral on to specialist speech and language therapy colleagues.

It is suggested that the findings from this study relating to this discrepancy may support EPs in feeling not only more confident but also mandated to take a more central role in the early identification of potential language difficulties. The study's findings may also further support collaborative working with other professional groups whilst respecting and maintaining professional roles and boundaries. (See also *Confidence in recognising typical language development* and *Confidence in recognising various components of language and whether they are breaking down, 5.5.4 & 5.5.5* following).

The discrepancy between the EPs' acknowledgment that the difficulties can be undetected, and the EPs' view of their minimal role in the early detection, may partially be addressed by the reminder that language difficulties are part of a continuum of need, whether in isolation or as a component of other needs. It is this combination which renders the EPs very well-placed to identify language difficulties, especially as 70% overall have said that language difficulties can *definitely* be masked. A further feature in this apparent contradiction is that, locally to this current study, EPs collaborate well with the highly-regarded local Speech and Language Therapy teams, and so may not only be cautious about crossing their professional boundary, but also see it as not necessary. However, it is possible that this may result in the EPs becoming less active in the early detection role.

5.5.4 RQ1. Confidence in recognising typical language development

It could be argued the corollary of this question is that, if the EP knows typical language development, then they will be able to recognise when a child's language is not following a typical developmental pathway. Responses to this item were marked on a scale from 1 to 6, with a verbal label at each extremity only. In Figures 12i and 12ii only 40% of the EPs marked that they were *extremely confident* (6) in this area, with 30% marking 5, and 20% and 10% marking 4 and 3 respectively. No EP marked a 2 or a 1 (*not at all confident*), suggesting a reasonable – if variable – level of confidence.

When comparing the EPs' confidence levels in typical language development with their responses to whether or not language could be a factor to explore, the responses appear to indicate that EPs do not have "language development" high on their assessment agenda.

However, when confidence in recognising typical language development is charted by years' experience, there is a clear pattern of increasing experience leading to greater confidence in recognising typical language. On the basis of the current study's premise and findings, albeit from a small group of EPs, and these would indicate a need for enhanced experience of this element of children's development in the training and initial years of practice.

It is important to note that the results for the query on the EPs' sources of confidence in their knowledge of typical language development question came only from 50% of the EPs i.e. [N]=10 (*Table 6*.). This figure does not reflect the 70% marking confidence scores of 6 & 5, and where only one EP marked 3 (i.e. below the half-way point). It is not clear how these discrepancies have arisen, but a possibility is that the EPs reviewed their level of confidence upon reflection in this subsequent item. The item on source of confidence had been included to ensure thorough collection of information but, as the study progressed, the information from it was judged to be incidental rather than central to the area under exploration.

As previously argued, the importance of recognising typical language development is fundamental to recognising when there may be difficulties. During the individual interviews the exploration of how EPs know what is typical language development led to responses which suggested this area remained elusive. The importance of building up practical experience seemed to be the central route. One EP's response illustrated this:

> *"It's just based on knowledge and experience of child development – what you'd expect a child to do at that age…so I do have an experience-led approach when I'm thinking about what the majority of children are doing. " [EP: 5-10 years].*

5.5.5 RQ1. Confidence in recognising various components of language

These results are interesting to compare with those from EPs' confidence in knowing typical language development where 40% were *extremely confident*. Figure 12i charts the comparison between this confidence and the various aspects of language which may break down. As might be anticipated, the pattern of responses for confidence in knowing typical language is broadly mirrored by the pattern for knowing delayed language. Taking a combination of scores 6 and 5 to act as a (suggested) measure of secure confidence, what is less clear is why fewer EPs are confident knowing about delayed language (combining score 6 and 5 on the scaling i.e. 12 EPs) than those confident in knowing expressive and receptive difficulties (15 EPs). A further conundrum is the discrepancy between numbers of EPs who are confident that they know

disordered language (9), although fewer are confident that they know the components which are breaking down (4).

When Figure 14ii of the 15 qualified EPs is scrutinised, the positive impact of experience is seen in the EPs' greater confidence in the areas of: typical language, expressive and receptive difficulties, and delayed language. However, when comparing qualified EPs only, against the inclusion of the EPs in Training, there is apparently little impact upon the pattern of reported confidence in recognising disordered language and which components may be breaking down. Without detailed knowledge of, and data on, the background and experience of the EPs in Training, it is difficult to comment on this pattern.

Scrutiny of the individual raw data sheets shows that three EPs said they were confident in both expressive and receptive language, even though they marked that they were not confident about typical language development. This may be a result of some factor in the design of the question; however, it may also reflect the possibility that it is difficult to know precisely what typical language is - hence the lower level of confidence - yet still be able to know and to recognise when it is not developing appropriately. Some of these themes also emerged in the individual interviews.

Two qualified EPs scaled their confidence at 3 for knowledge of typical language development, and this would bear further exploration. The researcher's concerns about this are based on an assumption that a knowledge of typical development is central to the role of the EP – otherwise how can the individual EP judge when issues for a child fall within the typical range, and which fall beyond? And how far beyond? This is only one dimension to the issue, since it is also important to bear in mind that children may be developing typically yet also facing a range of challenges, difficulties and issues which still require support.

An evident factor was the issue of distinguishing between language *delay* and language *disorder*. There may be a related debate about why this distinction is important. However, the researcher argues that an informed opinion in this area should help the EP to support a school in deciding the type of strategy to put in place, or whether or not to refer on. 3 of 15 qualified EPs marked a 3 or lower for their confidence in knowing *delayed* language and 4 of 15 marked 3 or lower for knowledge of *disordered* language.

5.5.6 RQ1. What EPs use to explore a child's language development

This item rests on an assumption that the EPs do explore children's language yet the previous data already show that this is not necessarily the case: this should be borne in mind when reflecting upon the patterns in the data (*Figures 10i to 10iv*).

The specificity of the question was designed to focus upon the exploration of the child's language. However, subsequent reflection shows that it does not necessarily illuminate the point of whether the EP may use the child's own reading book, but for a different purpose, for example as a warm-up activity or to focus upon reading skills. As such information is not necessarily directly relevant to the current study it is mentioned as an observation.

In responding, the EPs might have benefited from an opportunity to say whether it was a major or a minor source of exploration for them, possibly through ranking three top items, but this was not recognised during the pilot phase and is included here as a *post hoc* comment.

In terms of assessment tools employed by the EPs, the two main cognitive assessments (the WISC and the BAS) were listed, plus two skills-based normative assessments (WIAT-II and CELF). In the Other category, EPs cited Teaching Talking profile, Bishop's CCC – Children's Communication Checklist, the Portage checklist and PhAB (Phonological Assessment Battery). A basis for subsequent discussion could be the suitability of the various instruments used, and whether they are used actively i.e. selected for that purpose, or more by default, if there happened to be nothing else readily available.

The use of the CELF (Clinical Evaluation of Language Fundamentals) was unexpectedly high, with 7 of the 15 qualified EPs using it with certainty levels of use varying from 6 to 4 i.e. from *definitely* through *probably* to *possibly* – 7 of the remaining qualified EPs said *possibly not* while 1 said *definitely not*. One of the 7 noted that they used the CELF data reported from the speech and language therapist.

> *"I take the CELF scores from SLT and I try to see the child in a home and school setting, but if there's a language difficulty there they tend to be known to SLT. I use formal standardised tests in a more dynamic way such as some of the Early Years BAS." [EP: 0-4 years].*

There did not appear to be a whole-service EPS 'Assessment model' to structure EPs' assessments, and individual professional judgement and preference was evident:

> *"WOLD, WIAT, Sentence Comprehension Test, CELF, Observation Checklist, but not really the BAS or the WISC. I use the others in a dynamic way - working memory and comprehension." [EP8: 11+ years]*

while another EP described their approach as:

> *"I use cognitive scales or diagnostic scales - ways to look at what they like, are good at, where they need help. I would more commonly go to verbal scales of the WISC or BAS but mostly it is consultation on language – receptive and expressive." [EP: 5-10 years].*

As the study progressed it became clear that the temporal sequence of identification of potential language difficulties was being understood differently and not all the EPs recognised the argument that there needed to be an identification process before referral to speech and language therapy, as it is the early identification which should trigger that referral process. In the individual interviews one response reflected the potential dilemma of the point at which collaboration with another professional becomes a reliance upon their work. This is not to suggest an implication that this should not happen, but it could arguably indicate an abrogation of professional responsibility. It should be reiterated that the current study is seeking to encourage EPs to be involved at the stage prior to the child seeing the speech and language therapist: the argument is that by that stage a child is seeing a speech and language therapist they have - potentially - already had their issues identified.

This is an interesting feature in considering the boundary between and the collaboration and overlap with the Speech and Language Therapy service, for whom the CELF is arguably a central part of their assessment process. It could be hypothesised that services present differing levels of availability and accessibility to children. When the responses from the whole EPS, including Assistants and Trainees, were scrutinised, 9 colleagues actually marked that they used it (i.e. 2 of the 5 Assistant and Trainee EPs). Subsequent review of the CELF element of the data showed that all these 9 EPs marked that they were confident in the area of language, although 3 of the 9 marked their confidence at 4. As can be seen, the anonymity of the data prevented further analysis of the nature of this potentially puzzling discrepancy.

5.6 RESEARCH QUESTION 2.

RQ 2a.	*Does EPs' confidence in assessing children's language change following a training session in language difficulties and the use of a specific assessment?*
RQ 2b.	*Does any **change** in the EPs' confidence in this area reflect their length of service?*
Source	Data (B: pre-) Participant EPs' self-rating in initial interview [N]=9 Data (B: pre-) Participant EPs' initial interview [N]=9 Data (B: post-)Participant EPs' self-rating in follow-up interview [N]=8* Data (B: post-)Participant EPs' follow-up interview [N]=8*

5.6.1 Introduction

The source of the data for RQ2 is the participant EPs' semi-structured interviews with the researcher, during which the EP was invited to rate themselves against a 10 point scale on two occasions: at the outset of the study and three academic terms later at the conclusion of the study, during the follow-up interview. Further data were derived from the interview content which was analysed through Braun and Clarke's (2006) thematic analysis method.

5.6.2 RQ2a. Pre- and post- self-rating scores of confidence

5.6.2.1 EPs' Initial self-rating scores of confidence

The information on the EPs' confidence in assessing children's language was derived on two occasions: a self-rating scaling (1 low to 10 high) of where they considered their confidence to be at the commencement of the study, and before both the interview and the training, and their self-rating at the follow-up interview one academic year later, where additional views were also obtained (*Table 7, Table 8 & Figure 17*).

The initial rating was made right at the outset, before any discussion had taken place. Furthermore, during the course of the initial interview, some EPs tended to state that they felt their judgement of their own practice at the outset had been inflated. This resulted in 3 of the EPs (33%) actually lowering their confidence rating score at the end of the initial interview, saying that this was more realistic now that they had considered all the issues during the interview.

5.6.2.2 EPs' end of study self-rating scores of confidence

The repeat of the scaling at the end of the study showed that, of the 8 EPs remaining in the study, 6 reported increases in their confidence, ranging from 1 point to 4 points on a 10-point scale. (*Table 8 & Figure 17*.).

5.6.3 RQ2b. Did the change in EPs' confidence relate to length of service?

There were two sources of data for this item - the questionnaire showed a general trend where lack of confidence was more evident in the colleagues who were newer to the profession. However, the participant EPs did not have such a clear trend evident and it would be unwise to draw any conclusions from these data. However, it may be helpful to consider the corollary - that increased confidence in a specific area of EP practice should not be assumed from greater experience as an EP.

> *"I feel it showed me what I didn't know, so that was a bit of a shock, actually. I had been pretty relaxed about this area, but now it's set me thinking! Mustn't let it knock me back too much though." [EP: 5-10 years].*

Eight of the nine original participant EPs were available for the whole study and therefore the follow-up interview and discussion, and there was a sense (unsupported by data) that EPs began the follow-up interview with more confidence than during the initial interview, and this was apparent both to them and to the researcher. As EPs' experience increased there appeared to be less change in confidence, which reflects what might be expected for less- and more-experienced members of a profession. It is argued that some of the principles of the Matthew Effect (Merton, 1968) form one dimension in this process and, although a corresponding increase in *competence* cannot be assumed from an increase in *confidence*, one EP noted:

> *"Well this is my area really, so the main thing for me was that I was interested by the activity and having the opportunity to have a different, well slightly different, way of working with a child. But it didn't affect my confidence, though I suppose it may have, but actually it probably has affected my competence, with having a wider set of things to draw on. [EP: 11+ years].*

One EP had been on extended leave and just returned at the point of the initial self-rating. Returning to EP practice seemed to provide the opportunity to reflect on the complexity of the role, its challenges and the change in priorities. Aspects of this discussion would have implications for colleagues returning to work after a break, but it is not appropriate to include the details here to ensure confidentiality.

Another EP commented that the process of the interview resulted in questioning the level of personal confidence in this area:

> *"Going back to my self-rating [for the current study], I realise I don't feel particularly confident in this area at all, so when I think about conclusions that's really got me thinking." [EP: 0-4 years].*

One EP's confidence remained at the same level – but that initial level was already high, the EP having had extensive relevant experience prior to becoming an EP, and it was clear from the interview that language was already an area of significant specialism.

For the personal self-rating scaling it is difficult to tease out the impact of the range of factors, including comments relating to confidence of inexperience, natural modesty, individual style, being aware of and knowing what you do not know, the EP having a greater understanding the longer they have practised as an EP, and to the EP's previous professional and personal experience; for example, one EP had previously headed up a Language Unit. Bywater and Affourtit (2011) had argued that the older the worker the more modest about their skills, which may relate to an EP with a long term of service yet who made a smaller gain in confidence than some other EPs.

In terms of support for a proposal that EPs could benefit from specific professional development in the area of language, it could be argued that analysis of these factors may not be the crucial point. A stronger indicator could be the change in perception of the confidence and practice for the EPs in this study, particularly when this is set alongside the information from the literature review revealing both the extent of potential difficulties in children and the importance of early identification of language issues.

Some EPs were already confident in this area:

> *"Well because I know what I'm looking for I do feel reasonably confident about conclusions. Well! They are initial conclusions at the start, of course!! But then it depends on how complex the child is, really." [EP: 11+ years].*

Comments on the EPs' increase in confidence were numerous, and a compilation of features of the task which supported this increase in confidence can be seen in the Thematic Analysis section [5.4.6.2 Features of the study: Assessment task]. However, a compilation of some of the comments from EPs shows the impact:

- Gave confidence in what the EP was doing and why; confidence in this area alongside other professional groups; confidence in thinking dynamically; enhanced confidence in the discussion of observations with colleagues in school ; it led to wider use of more open questions to staff because it increased confidence in speech and language [7 EPs].
- The **answer sheet design** was really useful; having the picture meant I could think about what the child was doing; It is difficult to keep the flow of the narrative and record verbatim the child's responses – the design of answer sheet form was very useful - it makes you more confident about focusing on what the child is saying [6xEPs].

- It led to new hypotheses – I would not have asked those questions of staff to explore - leads to confidence [4 EPs].
- A good basis for hypothesis generation and it gave a basis for feedback and discussion with staff and parents - that makes you more confident going into the discussion [2 EPs].

5.7 RESEARCH QUESTION 3.

RQ 3a.	*Is a training session in language difficulties and using the specific assessment useful to the EPs in their practice?*
RQ 3b.	*Has the training session in language difficulties and using the assessment changed how the EPs will subsequently assess language?*
Source	Data (B: post-)Participant EPs' follow-up interview [N]=8** Data (C): Comments from the group discussion

5.7.1 Introduction

The sources of the data for RQ3 were the follow-up interview and the end of study group discussion. There was a small element of quantitative data, while the content of both sessions was subject to thematic analysis to draw out themes.

5.7.2 RQ3a. Was the training session and assessment activity useful to the EPs?

5.7.2.1 Follow-up interview data - quantitative

The EPs' comments about the usefulness of the training and the assessment activity were recorded against a six-point scale and therefore presented graphically.

All the EPs would either *definitely* (6 of 8) or *probably* (2 of 8) use the Frog Story again whilst seven of eight EPs said that both the Frog Story and being part of the study would *definitely* or *probably* change their practice, while one EP said it would *possibly* change (*Figures 11 & 12*).

5.7.2.2 Follow-up interview and group discussion data - qualitative

The majority of the comments are positive, and where the EPs have wished to voice observations and criticisms, these were framed in an honest and direct, yet constructive manner.

The level of the EPs' knowledge in language development was varied as anticipated, but the training session was regarded positively as being useful:

> *"I still see language as really important but I think that after the training we had [as part of the study] I was much more aware of the areas to be looking at, so it helped me thinking about it and how to organise it better. It sort of brought it to the front." [EP: 5-10 years].*

A feature which emerged from scrutiny of the data is that EPs do not necessarily have a robust way of recognising what constitutes 'typical development' in order to recognise when a child's skills do not fall within the 'typical' range.

Comments from the EPs in both settings indicated that they were surprised at the issues that emerged from using the Frog Story book – this leads back to the issue of the possibility of language difficulties being masked (*Figure 11i*).

The assessment activity had been included, at least in part, to provide a degree of consistency for the study. However, the wide range of comments made by the EPs suggests that the Frog Story had been more useful than anticipated. It seemed that the EPs had not anticipated that it would provide what they judged to be the varied and helpful information which it generated, not only in terms of hypothesis testing, but also for enhancing confidence in discussion with parents, schools and other professional groups. They also noted that they were beginning to get a 'feel' for what they might expect from the activity.

> *"The Frog Story … it definitely made me feel more confident. I just felt like I knew what I was doing, that it began to have a predictability about it, so that I was already building up a bank, almost, of things I might expect to see in the child; and it verified things I had noticed anyway in some children, which I think is really useful in itself because it's another angle on general observation." [EP: 5-10 years].*

The EPs noted a range of (potential) anomalies and 'breakdowns' in children's language. For a feature to be included in this summary list each one was noted by more than one EP. Each negative feature arguably has an opposite positive feature and this should be borne in mind for the capacity of the activity to show a child's strengths as well as difficulties:

- Labelling each picture accurately but not 'joining them up' into a narrative.
- Absence of thread of narrative & story development – this could relate to language needs or to lack of narrative experience
- Apparently not recognising or realising that the frog is the same in each picture
- Not attributing causality to the scenes
- Mis-reading intentions and actions
- Vocabulary difficulties - not knowing the word
- Vocabulary difficulties - not retrieving the word
- Being hasty and superficial
- Being distractible – either by external events or by some aspect of the story (e.g. perseverating on one feature: no text, no colour)
- Not understanding/appreciating the humour

- Not reading emotions
- Not labelling the emotions
- Frequent checking with the EP what the characters are feeling
- Focus on emotions and checking out whether someone is angry or not
- Not making additional 'social' comments on the story e.g. not making such spontaneous comments as: 'It'll by Yuk on the next page…' or 'I wonder what's going to happen next …'
- Grammar and syntax: are they immaturities and delayed? Are they disordered?
- Pronoun confusion e.g. he/she and waitress for waiter used interchangeably

5.7.2.3 EPs' end of study comments on usefulness of the training session and assessment activity

The repeat of the scaling at the end of the study showed that, of the 8 EPs remaining in the study, 6 reported increases in their confidence, ranging from 1 point to 4 points on a 10-point scale. (*Table 8 & Figure 17*). Of the two EPs who did not report a change in confidence, one EP noted a drop in confidence and this had not been anticipated in the planning and execution of the study. The ethical issues of the potential impact upon the EP could be profound, and should be recognised. In managing these, there was extensive discussion between the researcher and the EP, considering the range of factors contributing to this situation. The researcher and the EP were both satisfied that this drop could be understood in the light of the context as discussed. The second EP whose confidence did not change had a pre- and post- self-rating of 8, as this colleague was extremely experienced in this area:

The responses to the discussion about the usefulness of the assessment activity were almost universal, although tempered with realism and appropriate constructive comments. The features they appreciated were

As an activity:

"Very useful as a starting point; seemed to give a really good 'flavour' of the child; a good thing for setting the scene and feeling natural - sharing a book with a child" [and similar from 7 EPs]

"Quick to go through; efficient in a short space of time; very economical "[and similar from 4 EPs]

"It seemed to be really useful, just having it there to hand, and with the answer forms. So whenever I got the opportunity, out came the Frog!"[EP: 5-10 years].

"Something easy to have in your bag" [5xEPs]

"I really liked it … I was beginning to build up a 'bank' of expectation of how a child would approach the task" [and similar from 4 EPs]

> *"The answer sheet design was really useful; having the picture meant I could think about what the child was doing. It is difficult to keep the flow of the narrative and record verbatim the child's responses." [and similar from 6 EPs].*

Guidance for use:

> *"I appreciated the open-ended nature of the guidelines: the way the guidelines were set up; it was flexible and not too constraining…" [and similar from 2 EPs].*

EPs' concerns primarily related to the style of the book: that it was old-fashioned, lacked colour, and was limited in its cultural significance:

> *"I was surprised that the children liked it as much as they seemed to. After all, the pictures are not very inspiring and I don't think they're very clear either, but I like the standard format across the titles - the same elements really." [EP: 5-10 years].*

Finally, a compilation of the cautions raised by all the EPs and recognised by the researcher and noted in the context of the many positive experiences of its use described by the EPs:

> *"The biases – not just for children with EAL, but cultural biases".*
>
> *"Culturally it is quite 50s and a monoethnic group of children – a bit Winnie-the-Pooh style".*
>
> *"The pictures are not very appealing –it's very American and quite long, particularly if you've got a child with attention issues".*
>
> *"It's pretty old-fashioned; I don't think I would have been interested in it as a child"*
>
> *"Its style is American and the pictures are not very appealing, but I suppose it was easy to have in the bag and I still think it's useful!"*

5.7.3 RQ3b. Will the training session and assessment activity change EPs' practice?

[NB repeated from 4.4.1. above for consistency of presentation and ease of finding specific information within the thesis].

The EPs' comments about the usefulness of the training and the assessment activity were recorded against a six-point scale and therefore presented graphically.

The seven EPs who said that the study would *definitely* or *probably* change their practice all adopted a casework-based model, while the EP who was less sure about the study's impact on future practice (*answered: possibly)* related this to their own style of working, which was more closely allied to a consultation model, and although the knowledge would remain applicable, the opportunities for using the activity would be limited.

All the EPs would either *definitely* (6 of 8) or *probably* (2 of 8) use the Frog Story again whilst 7 of 8 EPs said that both the Frog Story and being part of the study would *definitely* or *probably* change their practice, while one EP said it would *possibly* change (*Figures 13 & 14*).

5.7.4 Findings relating to broader professional issues

Some of the themes which emerged were not directly related to the research questions, but emerged tangentially, while the participants reflected upon the process of using the Frog Story activity. It could be argued that this, along with other examples, indicated the high level of professionalism of the EPs, and their innate readiness to apply a psychological approach to their own practice. These responses on a range of professional issues were included spontaneously as part of their thinking about their role, and were not directly cued in through the semi structured interview: the EPs consistently demonstrated reflective practice as they explored underlying issues for them, as participants in the study.

5.7.4.1 A child-centred approach to evaluating the assessment activity

The EPs expressed appreciation that the assessment task was a very natural activity for an adult and child to do together, suggesting that this feature would make continued use more likely in the future:

> *"For the child, it's a very familiar activity for an adult and child … to look at a book together." [EP: 5-10 years].*

and

> *Very useful as a starting point; seemed to give a really good 'flavour' of the child; a good thing for setting the scene and feeling natural - sharing a book with a child" [and similar from 7 EPs].*

When the EPs were invited to express any concerns about the study, these related most frequently to the general child-centred view that the books were dull:

> *"I was surprised that the children liked it as much as they seemed to. After all, the pictures are not very inspiring and I don't think they're very clear either, but I like the standard format across the titles - the same elements really." [EP: 5-10 years].*

Or, more critically, the extent of cultural bias and how that might impact upon the validity of the activity and, by implication, the quality of their professional assessment approach:

> *"Culturally it is quite 50s and a monoethnic group of children in the stories. It's a bit Winnie-the-Pooh style […] pretty old-fashioned; I don't think I would have been interested in it as a child." EP: 5-10 years].*

and

"The biases – not just for children with EAL, but cultural biases".

5.7.4.2 Reflections on professional practice

Elmore (1996), writing about teacher education, argued that new ideas or approaches favour those who reflect on their practice, and this view is echoed by one EP:

"If an EP engages with something new [i.e. this task] then it does have an impact on your understanding of that area – it stimulates those questions – brings you back to questioning: Why you do what you do." [EP: 0-4 years].

Sankar (2010) had argued that knowledge could be increased equally effectively by delivering the information face to face or by computer program. However, Sankar continued by arguing that it was the face to face contact in learning which enhanced *Confidence,* supporting the approach for the group process of training and subsequent discussion, while DuFour (2004) and Earl and Katz (2002) also argued for the value of group discussion:

"The talking with the other EPs [colleagues in the same office working with the study and the group discussion] I thought that was very illuminating. The whole process of what you do know – both as a way of developing practice and with the Frog tool. When we looked at what each had done, and then we were thinking about whether there were alternative prompts based on listening to the others' feedback. Really useful." [EP: 5-10 years].

In terms of their learning and the impact of the study on their practice, the EPs linked these closely to their increased confidence, and it was the range of their comments that led to the construction of the super themes *Credibility* and *Legitimacy*: these reflected their view that they not only felt more confident themselves but also more confident about how they were viewed by others - presumably being seen as more competent and, by implication, having greater *Legitimacy* and *Credibility*:

"You know that EPs…well we are proud not to have certainties, aren't we? We tend not to say "It is this…" because we know all the things that can be happening or have happened for a child … and any or all of that could be having an impact. […] But I've been thinking […] I just wonder what others - teachers, parents, SLTs think about us - do we look professional or do we look like wishy-washy fence-sitters? Do we come across as not really knowing what we are talking about? I don't know the answer to this, but I certainly felt that this process [the study] gave me a basis to continue to hold all those uncertainties, all those hypothetical strands - but with firmer foundations, if you know what I mean…?!" [EP: 11+ years].

Professional roles and boundaries were evidently an issue for the EPs generally giving the sense of respect for other professional groups; however, this could be argued occasionally to spill over into an assumption that another professional group has more right, or more opportunity to detect language issues, when this is not necessarily the case:

> *"I think we split language off to the Speech & Language [specialist teaching] team or to speech and language therapists. It's about roles and functions in systems and the early impact on children." [EP: 5-10 years].*

5.7.4.3 The emotional component

Other than the regrettable drop in confidence for one participant, the overwhelming sense was one of positive attitudes towards the study and its impact, leading to the possibility that this simple intervention could have a disproportionate effect on the EPs' sense of their professional practice. Once this is achieved, and use of the approach were embedded in EPs' practice, it could be argued that Merton's Matthew Effect (Merton 1968) of the accumulated advantage would then be an element in sustaining and gaining in confidence and knowledge in the area of early detection of language issues. Furthermore, Guskey's work argues that the most effective way to develop an individual's practice is for them to see and experience the positive impact it has upon others (Guskey, 2002):

> *"It made me feel clearer about trying to make sense of a little boy who was really puzzling. And it made sense to the teacher too, and they also felt that their views – and their – judgement had been respected, almost. It definitely made me feel more confident. I just felt like I knew what I was doing." [EP: 11+years].*

and

> *"It just felt like a good morning's work. And I'm pretty sure they were really pleased too." [EP: 5-10 years].*

5.7.4.4 Issues for professional debate

A number of significant profession-wide issues - ones that could be argued as being ubiquitous to educational psychology - emerged through the interviews and discussion. As they potentially appeared to be exerting an impact upon the EPs' practice, an EPS may wish to consider them in the light of the way the EPs in the team should conduct their work. The participant EPs all belonged to an EPS with (arguably) a liberal stance to the team members' professional practice, supporting and fostering the range of individual approaches, whilst adhering to guidelines for standards of practice.

On the matter of preferred ways of working, both consultation and casework were favoured by different participants:

"….but mostly it is consultation on language… ." [EP: 5-10 years].

" …but if we move to even more of a consultation model…well... might never get to talk to a child again!!" [EP: 5-10 years].

while the discrepancy model also generated disparate views:

"…the first thing I would do is a standardised assessment. You can dip into it, can make comparison when language is low and visual is high." [EP: 0-4 years].

"… I use formal standardised tests in a more dynamic way such as some of the Early Years BAS." [EP: 0-4 years]

and the pressure from others to work to this model takes the debate beyond the confines of the educational psychology profession:

"There is pressure from other professionals to give a cognitive score and then this leads into discrepancy testing." [EP: 5-10 years]

Time pressures are a further factor to have a potential impact upon practice, relating to the psychological tenet of using an assessment approach which gathers data over time and in a range of contexts. This EP expresses their professional instinct not to make a snapshot judgement:

"Early Years is tricky as we just don't seem to have enough time to work out whether are we are looking at delayed patterns or are we looking at disordered. […] Then there's the statutory timescale and pressures, when really, you want to wait and then see him in three months." [EP: 5-10 years].

5.8 KEY FINDINGS FROM THE STUDY'S RESULTS

The key findings are presented with due regard to the cautions and constraints on drawing firm conclusions from a multifactor social context. However, on the basis of the background established by the literature review, the data derived from the mixed methods design i.e. Phase I whole EPS questionnaire survey and Phase II the individual interviews, the three terms' application of the assessment activity, and Phases IV & V the follow-up interviews and end of study group discussion, the current study argues for the following findings:

From the literature review:

- Prevalence rates show language difficulties to be widely-present, pervasive, often undetected, and have the potential to exert a negative long term impact upon individuals and on society as a whole (Bercow, 2008, Strand & Lindsay, 2009, Dodd & Crosbie , 2011).

- In the process of Continuing Professional Development (CPD), psychological theories of change and development support the view for the importance of accumulated knowledge (Matthew Effect, Merton, 1968), group processes in CPD (Earl & Katz, 2002, DuFour, 2004) and continuous improvement (Zangwill & Kantor, 1998).

- The research available looks at confidence and EPs' practice with regard to the profession as a whole (Passenger, 2014) or the impact of EPs' practice on the confidence of others, for example teachers (Reid, 2015). However, there appears to be no research in the area of EPs own confidence as practitioners.

- The prevalence rates of undetected difficulties suggest that it could potentially be a relatively frequent occurrence for an EP to work with a child who has such difficulties, either as their major presenting need or as a component in a more complex profile of need (Dodd & Crosbie , 2011).

From the data:

- In both the whole-service questionnaire and the participant interviews, the EPs regarded language as being extremely important to a child's development and learning: they commented upon the importance of language to a child's development, and indicated that there is a lack of EP confidence in this area. (RQ1 and additional data).

- The EPs responded that they were not entirely confident in their knowledge of language development, and somewhat less so in their knowledge of language issues and difficulties (RQ1). Further discussion linked this lack of confidence to the themes of *Role boundaries, Collaboration* and *Credibility:* the EPs' comments reflected contradictions, where they expressed a view that Language issues were not necessarily central to their practice, yet also conveying a degree of regret in having less knowledge and expertise in this area than they would like. Their comments variously rationalised this as responding to protection of and respect for others' roles (presumably Speech and Language Therapists), or to lacking credibility in discussions with SLTs and with non-specialist staff.

- The EPs did mostly think that language issues could be masked (to varying degrees) by a superficial competence that would prevent these being detected by a teacher or parent (RQ1). The issue of EP involvement was again blurred by the expressed view by many EPs that this related to respect for others' professional roles.

- However, the EPs did not necessarily see language assessment as being an aspect of their professional role or an area to explore with a child, whether or not language had been raised in the referral information. The EPs held a view of the likelihood that a speech and language therapist would already be involved, and did not always recognise that that someone other than a speech and language therapist needs to have raised concerns about a child for there to be the involvement of speech and language therapy (RQ1).

- The language difficulties training session and the assessment activity were both reported by the EPs to have been significant components in the almost universally positive impact of the study upon the EPs and their practice (RQ2), The possibility of the Hawthorne effect appears to be diminished by the EPs' comments on the specific aspects of the two-part intervention, where they presented negative evaluative comments alongside their positive views. The thematic analysis process derived themes relating to the highly variable and sometimes serendipitous routes by which EPs had gained their knowledge and experience, with comments which clearly reflected the apparently disproportionate impact of knowledge and experience (as gained through the study) upon *Confidence* and hence into *Credibility.*

- The majority of EPs stated that the training and assessment activity would make a difference to their practice in the future (RQ3). This would be an important, if not crucial piece of follow-up work to explore the likelihood of the approach becoming embedded in an EP's practice, or in the Service-wide approach which an EPS may choose to take.

- Some of the themes which emerged were not directly related to the research questions and reflected the high level of professionalism of the EPs, and the universal application of a psychological approach to their own practice. For example, the EPs consistently demonstrated reflective practice as they explored underlying issues for them, in contributing to the current study. They commented spontaneously on features of their own practice, their own learning processes and considered the impact of their own level of knowledge in this area on their practice. In addition they consistently considered the child's perspective and experience of the activity.

- The 'profession-wide issues for debate' which have emerged from the data may form the basis for an EPS to explore their Service-wide approach to professional practice. Furthermore, consideration may be appropriate for the issues which arise in collaboration with other professional groups, and effective co-working may be enhanced by sharing an understanding of the psychological approach to assessment, and the potential anomalies created through the discrepancy model and psychometric assessment in its wider sense (Miller, 1999; Ashton & Roberts; 2006; Dunsmuir, Clifford & Took, 2006).

- The three latent super themes posited by the researcher as reflecting across the data and across the EP group in the study appear to capture the tensions which arise from EPs conducting themselves in a professional manner: the EPs respect others' professional boundaries, whilst apparently seeking the three factors which have been argued in this study to be in a dynamic and inter-dependent relationship to each other: Legitimacy, Clarity and Confidence. Together these capture the impact upon the EPs' professional practice of collaboration in the study.

It should be re-emphasised that the study is not arguing for duplication of the speech and language therapist's role. However, it is also argued that the EP is in a key position to contribute to early identification of the possibility of difficulties with language development as a central or contributory factor for a child referred. Such identification would then be supported through collaboration with the relevant specialist colleagues: primarily speech and language therapists.

5.9 ADDITIONAL GENERAL COMMENTS, ISSUES AND UNANSWERED QUERIES

The concept of confidence in professional practice appears to be somewhat nebulous and elusive, and the absence of a clear and shared definition should be acknowledged. However, a general understanding of the term has been assumed in the current study.

The following comments and themes arose from the interviews and the group discussion and are included here to illustrate the EPs' views of the wider context within which the study has been conducted.

EPs were responding that the County's schools already have good Speech and Language Therapy involvement, and this view appears to give the EPs confidence that the language issues will be recognised and addressed. However, a significant proportion (100% of those EPs with 6 or more years' experience, and 70% of the whole EP group) said that they believe that language difficulties <u>can</u> be masked, yet are also referring to Speech and Language being involved. This is despite the fact that language difficulties which <u>are</u> masked will not lead to a Speech and Language referral. As a sequitur to this, the further contradiction is that the EPs may hold the view that language difficulties can be masked, yet they did not fully regard themselves as being in the role of a professional who could identify this.

A further unanswered query relates to the argued distinction between the needs-led and the medical model (Miller, 1999) and how to balance, accommodate, and reconcile, if not actually harmonise the two different professional perspectives.

An element within the data relates to the ongoing EP debate on the relevance and appropriacy of ipsative versus normative data. There was a sense of some contradiction and dissonance in some of the views presented, mainly in the area of assessment, standardised and normative data, and how to reconcile this, and this is where EPs were expressing some mixed messages during the interviews.

A further clear perspective from the EPs was their marked sensitivity to the variations in the children seen, the contexts in which the children were learning, and the EPs' need and aim to tailor everything to the child's levels and experiences. The fact that many of the EPs stated a need

to observe the functional aspects of a child's language in context makes the qualitative "real life" approach particularly relevant to this area for exploration, as the EPs are already applying a social constructionist perspective to the assessment process.

5.10 SUGGESTIONS FOR AN EDUCATIONAL PSYCHOLOGY SERVICE

The current study provides a basis to consider whether the issues discussed would merit further exploration or, at the least, discussion with EP colleagues, who may or may not subsequently consider this to be a fruitful area for the profession to include in its practice. Any suggestions made are prefaced by the assumption that an individual EP and an EP Service shares the researcher's conclusions: that there is evidence to show the importance of the early identification of language difficulties because long-term outcomes are poor, these difficulties can go undetected or may be embedded as a component in a more evident presenting learning need, and that there is a role for EPs in this process. It is further argued that the EP can provide additional information without crossing professional boundaries with speech and language therapy colleagues.

The observations, arguments and conclusions which are relevant for an EPS to consider are:

- EPs in the study consistently appeared to regard language issues to be a primary need which someone else has noticed. The current study now provides some evidence to support the view that EPs both can and, it is argued, should be able to identify more language difficulties following a short training session and through the use of a simple assessment activity.

- Somewhat paradoxically, the EPs universally highlight the central nature of language for the child's development, learning, well-being, and social and emotional development, and the majority considered that language difficulties could be masked, yet did not then develop this into regarding language, at least in part, as being their role to explore. Their comments reflected an understanding of a continuum of need, as with other difficulties, from mild to moderate to severe, yet their responses reflected a continuing reliance on access to Speech and Language Therapy services. EPs made the point that they do not want to use assessments that they feel are the area of SLTs and potentially damage the relationship. This highly appropriate stance, it could be argued, underlines the importance of the task under exploration in the current study.

- Furthermore, if the EP does not feel mandated or empowered to explore language (at an appropriate level) then any early identification relies on the extent of knowledge of the range of other people who work with a child.

- Ashton and Roberts (2006) posit the view that EPs feel they have more to offer than is perceived by others: an EPS considering any change in practice, either within or beyond the profession, should be aware of this finding, as its insight provides a basis for understanding the underlying factors and ensuring an effective way forward.

- Although this study argues for the early involvement of EPs in the identification of children with language difficulties, that does imply a subsequent need for collaboration in terms of further discussions with speech and language therapy colleagues, and this would require good working relationships. If an Educational Psychology Service wished to foster greater collaboration with colleagues from other professional groups, the researcher argues for a need for agreed definitions, clarity of purpose in the collaboration, and clearly-defined levels and activities of involvement, in order to support successful working relationships in achieving this goal.

- As the data for RQ1 showed, some EPs do use psychometrics to explore a verbal/non-verbal discrepancy, while others do not, and some actively shun such an approach. In this event it will be important for EPs to be aware of the issues relating to the Specific Language Impairment discrepancy model, and the extent to which it is a robust model. It is suggested that an EPS would support clarity of practice by agreeing their theoretical stance to this question. This would have further impact in working with other professional groups who do espouse the discrepancy model, and with colleagues who make placement decisions on the basis of this model.

- There are additional factors which have emerged from the study, particularly the mechanism for gaining knowledge and experience, for example, in knowing when development is typical. Awareness of this issue could influence CPD programmes within the EPS.

- The CPD model of Plan-Do-Study (or Check)-Act is widely researched and applied, and already forms the basis for the EP profession's reflective approach to their CPD (PDCA: Deming, 1986; PDSA: Langley Nolan, & Nolan, 1994).

It may be useful, if so desired, to share these findings with the host educational psychology service in order to support service-wide developments. However, if that were to occur, it is of course most important to bear in mind the limitations to generalisation, given the small scale nature of this study. Notwithstanding, there are useful insights, which at least could form the basis of discussion which might help promote an agreed future service-wide approach.

5.11 OBSERVATIONS & REFLECTIONS ON THE STUDY

The design of the study focused upon the EPs' practice in the area of language assessment following a basic training session, with the Frog Story assessment task occupying a secondary role and acting as the vehicle to support the EPs' practice. It was not anticipated that the Frog Story would yield quite such rich data and, with hindsight, the study might have been constructed with a slight shift in emphasis, where the application and evaluation of the Frog Story assessment were somewhat enhanced in order to generate more-specific evaluation data.

The study is founded upon EPs' personal reflection upon their practice, as well as on self-report and evaluation: it is important to consider that the reliability of individual self-report and evaluation is vulnerable to a number of factors, as discussed in the study (Lauder et al., 2008). For example, an EP's personal view that they are confident in their knowledge of typical language development, and this actually being so, were not explored in this study

Reflecting at the end of the study, there is not a clear and linear relationship between self-reported confidence and years' experience. There may be a possibility that – at least for one EP - confidence actually drops as the EP knows more and more about the complexities of both the EP role and the children whom they meet. Alongside this, EPs may become increasingly self-reflective as a result of this growing awareness, resulting in some of the more experienced EPs initially marking their confidence as lower than the more recently-qualified.

Perhaps unsurprisingly, the range of prior experience before becoming an EP emerged as a component in the EPs' practice and confidence in their practice, although this has not been analysed for the study as it was so intended as background for the researcher. However, a common feature was the EP having knowledge of children, arguably a s*ine qua non* of the role, whether through family or professionally. If this does raise any questions for those who come

straight through the education system, either with or without teaching qualifications or experience, then separate compensatory measures could be identified and provided to enhance these opportunities for experience where necessary.

It can be argued that EPs are in a position to explore a fundamental aspect of child development and the study may help to ensure that there is an emphasis on this area both in training and in Educational Psychology Services. A follow-up study might provide an Educational Psychology Service with the necessary evidence to support this as having long-term benefits for children and young people.

Should EPs consider using a similar method of applying the same tool, in this case the Frog Stories, in order to build up a basis of expectation for what children might do with the task, this would parallel the familiarity an EP develops with a psychometric assessment; however, the study's assessment activity would be used at a more informal level, and at an earlier stage, acting as a *triage* or screen.

Further work might explore the role of training courses or other routes to ensure that all EPs have secure knowledge in this area, regardless of experience prior to becoming an EP or length of EP experience.

CHAPTER 6 ~ CONCLUSION

6.1 SUMMARY OF KEY POINTS

- The EPs regarded language as being extremely important to a child's development and learning and commented upon the importance of language to a child's development and indicated that there is a lack of EP confidence in this area. (RQ1 and additional data).

- The EPs responded that they were not entirely confident in their knowledge of language development, and somewhat less so in their knowledge of language issues and difficulties (RQ1).

- The EPs did mostly think that language issues could be masked (to varying degrees) by a superficial competence that would prevent these being detected by a teacher or parent (RQ1).

- The EPs did not necessarily see language assessment as being an aspect of their professional role or an area to explore with a child, whether or not language had been raised in the referral information. The EPs held a view of the likelihood that a speech and language therapist would already be involved, and did not always recognise that that someone other than a speech and language therapist needs to have raised concerns about a child for there to be the involvement of speech and language therapy (RQ1).

- The language difficulties training session and the assessment activity were reported both to have been significant components in the almost universally positive impact upon the EPs and their practice (RQ2).

- The majority of EPs stated that the training and assessment activity would make a difference to their practice in the future (RQ3).

- The 6 themes derived from the thematic analysis process (Language, Professional EP role, Features of the study, Post-study reflections on professional practice, Emotion, and Issues for debate) serve to organise the qualitative data, with three super themes being posited by the researcher: Legitimacy, Clarity and Confidence. Together these capture the impact upon the EPs' professional practice of collaboration in the study

The discrepancy between the EPs' views that language was fundamental to a child's progress, yet did not appear to see it as their role to explore in an initial referral, appears to reveal some inconsistencies in their thinking. The study suggests that one possibility for this is that the EPS has a highly-regarded Speech and Language Therapy Service within the County, and the combination of the SLTs' effectiveness and the respect between two professional groups may be an underlying explanation for this discrepancy. However, the EPs did not universally recognise that there needed to be an early identification by someone other than speech and language, in order to precipitate a referral to speech and language and, it could be argued, the absence of confidence resulted in a lower likelihood that the area would be explored.

At the conclusion of the study, EPs' confidence in the area of children's language development and its assessment was seen almost universally to be enhanced, with the two main factors being the initial training session and the use of the assessment activity; the participant EPs judged that a further valuable aspect of the study was the opportunity to discuss the issues arising with the other participant EPs in the study.

The relative impact of the two elements of intervention is not clear. However, the researcher suggests that the training session is central to ensuring that the EPs all have a similar baseline of knowledge, while the Frog Story assessment activity provides a semi-structured and predictable vehicle for the EPs to conduct an initial exploration of language. Thus it is argued that the training, or at least the knowledge, is crucial, while the EPs' positive comments about the Frog Story activity suggest that it – or something very similar – is also a fundamental component in the reported effect upon EPs' confidence. The Hawthorne effect should also be considered in analysing the impact of a study but, in this event, it is suggested that this is a much less likely factor in the outcome for the EPs owing to their professional background and training in research methods, their awareness of potential factors in research, and their inclusion of negative evaluative comments. A further factor to note is the small numbers of EPs involved with the study, with the resultant limitations to generalising from these EPs to the profession as a whole.

6.2 THE PRACTICAL IMPLICATIONS FOR EDUCATIONAL PSYCHOLOGY

It is argued that EPs are in a unique position as a result of working with children who have been referred for a range of presenting issues beyond language difficulties: it is the EP's role to bring specialist knowledge and understanding to bear on the identification of the

range of factors impacting upon the child's presentation, and within the child's wider context, thereby helping to determine the most appropriate formulation of the child's learning profile.

The EPs' responses in interview and discussion indicate a need for further work to guide them in being aware of the areas of potential language difficulties (delay or disorder). If an EP could determine if the difficulties lay in one of these areas, this would inform the type of discussion that might be had with school staff, child and family. To reiterate, this knowledge for EPs would be at the level of recognition of an issue, but would not approach the professional training and experience of speech and language therapists. The researcher clearly argues that the purpose of the study relates to early identification of potential language issues, not to the substitution of one professional group by another.

Both the training session and the assessment task provided to support the study are straightforward to deliver, in terms of time cost and relevant expertise. It is suggested that these would have a considerable benefit for educational psychologists in their general professional practice and, consequently, for outcomes for children and young people. Any further steps taken with regard to the current study would be predicated on the researcher's conclusion that EPs, and hence the children with whom they work, have a clear purpose for, and would benefit from having more knowledge and information in the area of assessment of language.

Based upon the research underpinning the study's argument for the need for early identification, and the key findings from the study, it is suggested that this aspect of the EP role would merit further debate to determine whether the issues found locally in one EPS are mirrored in a wider context.

Finally, the study promotes a higher level of awareness for the EPs in the area of language difficulties for children: there may be scope for EPs to develop this area of their work and to build a bank of expected responses to the study's assessment task or to one of their own choice, the better to recognise when a response is atypical or if the performance signals other factors in the child's presentation. EPs found the assessment task to be a sound basis for their professional assessment approach, including hypothesis generation, and for discussion with those working with the child. Even if the assessment approach were not used, the level of awareness of the area of language needs may remain an important feature in the EPs' practice.

It is suggested that the findings from this study may support EPs in feeling not only confident but also mandated to take a more central role in the early identification of potential language difficulties in children and young people.

6.3 STRENGTHS AND LIMITATIONS OF THE STUDY

Strengths of the study include a number of features.

The study opened with the Phase I pilot study exploration of EPs' confidence to ensure that there may be a valid question to explore, in the absence of research in this area. This questionnaire had itself been piloted and modified accordingly. Subsequently, the interviews were also piloted.

Other than the absence of literature in the specific area of EPs' confidence, the literature review provides a clear support for the supporting arguments for the need and benefit for EPs to be involved in the area of early detection of potential language difficulties, thereby setting the study firmly in a theoretical and research context. A further strength is that the study was conducted and set firmly in the context of everyday EP practice, providing a natural and accessible task for EPs to use.

The timing of the study was congruent with the growing pressure for greater rigour in CPD and more accountability in terms of professional competence for terms of registration, for example with the Health and Care Professions Council (HCPC), while the additional context was one of the legislative impetus for greater co-operation across disciplines (DfE, 2014).

Although it could be regarded as being a limitation, the researcher argues that a strength of the study is for the EPs to use the assessment activity in a flexible manner based upon each individual EP's own professionalism and personal style of working with a child. The assessment activity guidelines were intentionally flexible to avoid the introduction of an (arguably) unnecessary variable of attempts to standardise the instructions or administration, thereby also introducing a distraction from the main focus of the study.

The sample for the study was an opportunity one and, in terms of limitations, the size was, of necessity, small: this leads to cautions about the extent to which it is reasonable to generalise from the current study to the wider profession of educational psychology. After the 20 EPs completed the Phase I initial questionnaire survey, the whole service was invited to participate in the follow-up Phase II. However, this number was gradually eroded by a number of factors including those colleagues who felt they would not have sufficient casework to be helpful to the study, and then those who did not wish to be involved for other reasons. As discussed

previously, the context for a Local Government service at that time of major budget reform was unique in the pressures it brought to the EPs and the EPS, and those details need not be repeated here.

Although the study does create an argument to support continuing professional development for EPs (Lunt, 2002, Kennedy, Cameron & Monsen, 2009), a further caution, if not a limitation, is the observation that *confidence* cannot directly equate with *competence* which would be the behavioural indicator of an enhancement in practice (Roberts & Johnson, 2009).

An unforeseen issue which could be argued to be a limitation was the potential for an EP to have a negative experience and find their confidence dropping: this had not been anticipated, and certainly not intended, and it is suggested that this could have been recognised as a possibility.

The semi-structured interview had been chosen as a format to elicit EPs' views in a structured manner, yet with the flexibility to pursue individual strands of thought where relevant in an interview (Denscombe, 2003). However, on reflection, the interview may have revealed more. During the transcription process and data analysis there were points arising which, ideally, the researcher would have returned to with the EP, for further discussion and clarification. However, time and access to EPs was already a significant limiting factor, and re-scheduling further interviews would not have been realistic.

Although the EPs were, arguably, a reasonably homogenous group in terms of all being either professionally qualified or *en route* to qualification, there was such a difference in the range of experiences they brought to the role, from both within and beyond the EP role, that the comparison of confidence and length of professional experience raised questions about the strength and purpose of such a measure.

Finally, as an observation rather than a limitation, the study's mixed methods design is set within a critical realism and interpretivist perspective, and this is not appropriate to attain a level of precision to achieve replicability.

6.4 ADDITIONAL QUESTIONS MERITING FURTHER RESEARCH

During the design phase of the study it was necessary to maintain boundaries to the area under exploration and, as the study progressed, a number of additional questions arose, all of which are summarised here.

The study did not attempt to quantify the differential impact of the two different elements of the study in enhancing EPs' confidence in the area of assessment of language: the training and

the assessment activity. This may not be considered a necessary distinction to make, although further investigation in this area could ensure that the most appropriate features (i.e. training session or assessment activity or both) were provided for training EPs where requested. As part of such an exploration, related questions may arise, including content of training courses or CPD availability in EP Services

A further question which arose throughout the process of conducting the study related to where and how an EP gains knowledge on a specific area (in this case language development): following on from this, there is also the question of the relative importance of learning from an academic context (under- or post-graduate) and from the benefit of direct experience with children, and from discussion with others (Earl & Katz, 2002). Determining this distinction may help to inform minor modifications to models of training or to an individual EP's own planning of their CPD need, including the value of using mentors in the process (Spouse, 2003).

6.5 PERSONAL REFLECTION ON THE COMPLETION OF THE STUDY

It was a privilege and a pleasure to spend time hearing colleague EPs' views on this topic, with their constant thoughtfulness, insight, openness and refreshing ability to draw upon the issues in the topic and to explore them with such fluency and incisiveness.

The impact of the financial climate in which this study was conducted was a significant factor, where colleagues were being invited to collaborate with the researcher when there were changes in Government and Local Government reform and there was no certainty about the future for the EPS. Furthermore, all the things that happen to groups of people also happened during the course of this study: family distractions, family and health issues, and a range of other matters, all of which made it very difficult to call on people for data when they were under these pressures.

There was a luxury in becoming immersed in a topic and being able to explore it in depth. However, alongside the study itself, there was an enormous amount of additional challenge through the process of self-directed and distance learning and attempting to bridge the divide between practitioner and academic. The range of learning included managing the demands of the academic process, how to structure the argument, how to think academically and with precision, about the use and application of ICT, how to display the data and, finally, that working in isolation takes a considerable amount of self-motivation and discipline. External support, both academic and personal, was vital.

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APPENDICES

A - THESIS PROPOSAL SUBMITTED TO THE ETHICS COMMITTEE

Title (Provisional)

Just tell me when you don't understand - an exploration of the role of educational psychologists in the assessment of children's language

Brief description of the main aims of the study

The study aims to explore the role of the educational psychologist (EP) in the assessment of children's language. It is based upon a number of underlying premises:

- That language difficulties may be a component for children who are referred to the educational psychologist for other presenting concerns (e.g. behaviour, rate of learning, social difficulties, attention and concentration)
- That overt language difficulties will most likely have been recognised and addressed through the range of developmental checks or by professionals working with the child in school; however, as language difficulties are dimensional and not categorical, children may have less severe or evident language difficulties which nevertheless could impact upon their progress or be a feature within a more evident presenting concern
- That EPs may not feel confident in the area of assessing children's language, for a range of possible reasons which may include: sensitivity to the boundaries of different professional groups, especially Speech and Language Therapy; concomitant absence of experience in this area; a lower awareness of the impact of less evident language difficulties
- That EPs would be able to develop confidence in their practice in response to a relatively simple two-part intervention: a) the provision of basic information in the area of language difficulties, and b) the application of a specific assessment task for the EPs to use in their initial exploration of a child's language

Method of investigation

The study will use two main data collection formats for the exploration of the topic:

- a summary questionnaire for the whole Educational Psychology Service (EPS) [N]=c.24
- a semi-structured interview format for a smaller group of EPs ([N]=c.10) - the 'participants' - exploring in greater depth their views of their own professional practice in the area of children's *Language* at the outset of the study; this will be repeated at the end of the data gathering period in order to make comparisons on their views on any changes in their practice
- This investigation will be achieved through the following steps:

- Devising, piloting and presenting a summary questionnaire to a County-wide Educational Psychology Service to collect the anonymous views of EPs on their confidence in assessing children's Language [N]=c.24
- Summarising the data derived from the whole-EPS questionnaire in tabular and graphical format to explore trends
- Devising, piloting and conducting a semi-structured interview with a smaller group of EPs [N]=c.10 – the 'participants' - to collect their in-depth views of their own professional practice in the area of children's Language, and including a scaling system to derive quantifiable baseline data
- Providing the [N]=c.10 participant EPs with an information session covering the range of possible language difficulties in children
- Providing the [N]=c.10 participant EPs with a training session on the use of a specific assessment task to use with the children who are referred to them as part of their daily generic EP practice
- Creating a framework for [N]=c.10 participant EPs to use for recording the child's responses plus additional observations during the assessment task
- Transcribing and reviewing participant EPs' interviews, to identify trends in their responses
- Repeating the semi-structured interviews with the trained group of [N]=c.10 EPs to determine professional viewpoints on the changes (if any) in their confidence in practice in their professional area, and on the usefulness of the assessment activity technique, and to make judgements on the impact for their own professional practice and hence the impact upon Children and Young People

Participants required

Number of schools / organisations to be involved

- Approximately 12-20 schools; this is dependent upon number of colleagues participating, the schools they work with, and the children who are referred to them. However, the schools and children are not directly involved nor are they the participants
- Between 6 and 10 colleague Educational Psychologists from the County Educational Psychology Service – **these are the participants**

Type of schools / organisations

- Mainstream Primary Schools - definitely
- Mainstream Secondary Schools - possibly

Age-group of pupils, if to be involved

- All ages from 5-18 potentially, but most likely to be primary age,* and having been referred to the EP as part of the school's referral process to the EP

Number of classes in each school if to be involved

- No work planned with whole classes

If school-based whether it will involve:

- a whole class or classes ×
- group(s) taken from a class or classes ×
- pupils seen on an individual basis, but see also above* ✓

Total number of participants to be involved (approx. figures):

- pupils (15-20)
- teachers (0)
- parents (0)
- other participants (please specify) - Educational Psychologists (6-10)

Length of time pupils to be taken from normal lessons

The assessment activities and data-gathering would form part of the EP's individual work with a pupil – i.e. no additional time is taken from class for the study

Test material requirements

- No published test materials required
- Published books to be used: The Frog Story series (Mayer, 1969, 1974); and Where's Wally (Handford, 1987), depending upon the age of the pupil
- Individual record forms devised by the researcher for the participants' use

Request for approval from the school's Ethics Committee

- The activities which form the basis of the data gathering do not involve any unusual or atypical materials or require manipulation of variables in any way. The materials and their use would be part of typical EP practice in working with a pupil to develop rapport and to assess aspects of the pupil's communication skills and difficulties. The whole-Educational Psychology Service questionnaire is voluntary for EPs to complete, and the written (circling items) responses are anonymous (unless the respondent chooses to state who they are). There is no deception involved nor any selection of individual experimental subjects, other than the volunteer individual colleague EPs, whose selection is based upon their willingness and capacity to participate
- Recording of children's responses to the specific assessment task would be based upon a response form grid which would be congruent with EPs' professional practice
- Recording of the content of the EP interviews is by written notes and audio recording, with fully informed written consent at the initial stages of the study

Other matters

- None identified at this time

Thesis proposal – supporting information

Title of project

Just tell me when you don't understand – the role of the educational psychologist in the assessment of children's language

Purpose of project and its academic rationale

Professional experience shows that overt language difficulties will most likely have been recognised and addressed through the range of developmental checks or by professionals working with the child in Early Years settings or in school. However, as language difficulties are dimensional, not categorical, children may have less severe and less-evident language difficulties which nevertheless could impact upon their progress or be a feature within a more evident presenting concern.

EPs are in a specific – arguably unique - position because they meet children with a range of needs and for whom language is not necessarily an evident component; however, the EP's capacity to identify language as being a factor within the child's presentation should support a more complete formulation of the child's profile and inform the necessary understanding and intervention: a further feature is that language difficulties may be a component for children who are referred to the EP for other presenting concerns (e.g. behaviour, rate of learning, social difficulties, attention and concentration).

Personal observation and discussion with colleagues has led to the suggestion that EPs may lack both confidence and experience in this area of professional practice. This lack of confidence may be due to a range of possible reasons possibly including: sensitivity to the boundaries of different professional groups, especially Speech and Language Therapy; concomitant absence of experience in this area; an incomplete awareness of the impact of less-evident language difficulties. The subsequent suggestion is that EPs could be more confident and therefore more active in this area of assessment if they had access to some basic information on language difficulties combined with training in a semi-structured yet informal assessment task - one which would be an initial task prior to the possible administration of any psychometric or standardised assessment.

It is not clear whether these assumptions about EPs' confidence are correct or whether they relate to other factors. It does, however, lead to the conclusion that this is an area for exploration. The study is therefore based upon the assertion that EPs would be able to develop confidence in their practice in response to a relatively simple two-part intervention: a) the provision of basic information in the area of language difficulties, and b) training in the application of a specific assessment task for the EPs to use in their initial exploration of a child's language.

Academic studies in this area provide data on the importance of confidence as a concept within professional practice; studies also evidence the poor outcomes for children with undetected language difficulties, and illustrate the importance of early identification of such difficulties; these studies provide data on outcome measures for children into adulthood who have had language difficulties. The argument then follows that early recognition, and therefore intervention is fundamental to the purpose behind the argued need for this early intervention.

Brief description of methods and measurements

The study will use the following methods and measurements for the exploration of the topic:

- A summary questionnaire for the whole Educational Psychology Service (EPS) [N]=c.24. The data will be presented in graphical and tabular format to illustrate trends, but will not undergo statistical analysis.
- A pre-intervention semi-structured interview format for a smaller group of EPs ([N]=c.10 the 'participants') will explore in greater depth their views of their own professional practice in the area of children's language at the outset of the study. The content of the interview will be audio- recorded, supplemented with handwritten notes and transcribed
- An information session will be provided to inform the participant EPs of the nature and range of possible language difficulties in children
- A training session will be provided to inform the participant EPs of the specific assessment task and its use. The EPs will use the assessment task with any child (whom they judge it to be appropriate) who is referred to them as part of their generic practice with schools
- A post-intervention semi-structured interview format for the smaller group of EPs ([N]=c.10 - the 'participants' - will review each EP's views on both their practice and on the specific assessment task. The content of the interview will be audio- recorded, supplemented with handwritten notes and transcribed

Participants

[Recruitment methods, number, age, gender, exclusion/ inclusion criteria]

- Recruitment

The participants in the focused part of the study will be an opportunity sample of up to 10 colleague EPs, their selection reflecting both willingness and capacity to assist. There is no specific selection of children for the task since the participant EP will administer the narrative activity as part of the typical course of their casework with schools. The majority will be women, but the split of female: male is not yet known

- Consent and participant information arrangements, debriefing

The participant EPs will initially be invited to be part of the study in an email message which will give a full outline of the scope, purposes and commitment of the study, assuring them of a clear opportunity not to be involved, and with no requirement for an explanation why. Once EPs have agreed to be involved, they will be sent a further, more detailed information sheet which provides the information for the consent form.

Debriefing will follow the University's ethics guidelines, and will be offered in two stages: at the end of the second interview the purpose behind the study will be explained, and as the participants are professional psychologists themselves it is anticipated that this may become a rich discussion around hypotheses, professional practice and personal reflection. Further reassurance will be given about anonymity and security of data storage. The option to withdraw at this stage will also be given, before the data are anonymised.

A further debrief and sharing of the findings will be offered following the analysis of the data possibly involving the whole Educational Psychology Service team.

Intended information and consent forms attached:

- Initial survey of the whole EPS' views on assessment of language
- Letter to Principal Educational Psychologist requesting permission to recruit participants
- Initial email request to EP colleagues
- Participant EP information form
- Participant EP consent form
- Initial interview schedule with participant EPs
- Follow-up interview schedule with participant EPs
- Debrief sheet for participant EPs
- Letter requesting consent for EP work from school staff (subsequently not required by Ethics Committee)

A statement of the ethical considerations

Because there is no selection of individual children and young people to be involved in the study, nor any deception required for either children or the participant adults, the ethical considerations are kept to a minimum. The activity is designed to be typical of an activity an EP might conduct when working with a child or young person and does not require colleagues to administer anything unusual or beyond their typical daily practice. The children and young people involved in the study are those with whom the EP would be working as part of their typical caseload.

For the colleague EPs, the activity does not require any additional time commitment or work, other than the initial meeting to discuss language difficulties and administration of the task, plus the follow-up interview and de-brief.

However, once the EP is familiar with the activity to be carried out with an individual child s/he may feel that this raises a number of issues for the way s/he would work with an individual child. For example, s/he may consider that the research activity will substantially extend their time with a child, or that it would replace an activity s/he would have preferred to undertake with the child. If s/he is concerned that the research activity prevents them from undertaking their own preferred activities, then the EP's own practice must take precedence, and the research study activity should not be used. In the event that the EP considers the research study activity substantially alters the session with an individual child in any way, s/he should either suspend the activity or obtain the verbal consent of the child and provide the child's parent with the option of opting out of this activity if that is their wish.

Estimated start date and duration of project

Administration of the whole-service questionnaire, followed by initial information-giving and interviews, plus commencement of the task during summer term 2011; the project is intended to last for one academic year (2011-2012) with follow-up interviews and de-brief to be conducted during the summer term 2012.

Thesis proposal - additional information

B - INITIAL SURVEY OF THE WHOLE EPS' VIEWS ON ASSESSMENT OF LANGUAGE

The full version of the questionnaire is presented under Data Collection Methods.

C - LETTER TO PEP REQUESTING PERMISSION TO RECRUIT PARTICIPANTS

Dr H. K. [Full name to be included]

Principal Educational Psychologist

Countyshire Educational Psychology Service

S. Office Park

Town + Postcode

20th May 2011

Dear [Name of Principal Educational Psychologist]

DEdPsy Thesis: Request to approach colleagues as participants

As you are aware, I am a postgraduate DEdPsy student in the School of Psychology, Cardiff University. I have now planned the thesis aspect of my DEdPsy degree, and the University's Ethics Committee considers that the proposed research meets the ethical standards of the British Psychological Society. The research proposal has therefore been passed, and the Committee has given permission for me to approach you in order to obtain your consent to the research.

My research proposal is to carry out a study on the role of the Educational Psychologist in the assessment of Language in children and young people. The study is designed to explore the EPs' general views and confidence in this area of professional practice.

I am writing to enquire whether you would be willing to give your permission for me to recruit as many EP colleagues from the Countyshire EPS team as possible (minimum of 8) to participate in this research.

For each EP colleague this would involve:

a) an individual semi-structured interview with the researcher of about 30 - 45 minutes, discussing this area of EP practice. As part of this interview there will be an opportunity to capture the colleague's views on various elements of their practice using scaling from 1-10. The interview would be audio-recorded with the colleague's permission.

b) receiving some informal information from the researcher on the nature of language difficulties in children (30 minutes)

c) receiving some informal training from the researcher on a specific approach to assessment, with materials provided, as part of the EP's regular casework with children in schools (30 minutes)

d) a follow-up semi-structured interview some weeks afterwards to review the colleague's experience. This may take a similar length of time as the first interview, or be slightly shorter. The interview would also be audio-recorded with permission (30 minutes)

For the activity, each EP will be provided with one of a parallel series of children's story books without text (The Frog Story series), in order for them to share the book with a child and to ask the child to tell the story in their own words. Record forms will be created where EPs may note the child's responses. It is not intended to be applied in a prescriptive manner, but rather to be used in the flexible manner in which EPs frequently do work, giving prompts, support and guidance as appropriate to ensure that the child can feel successful with the task. In this manner the EP can then draw a conclusion about the child's capability with this narration task, and the implications in terms of either strengths or difficulties for the child and their learning within the classroom. For older students they can either be asked to tell the story 'as if you were telling it to a much younger child', or an alternative stimulus will be used from the 'Where's Wally?' series, with the intention of the young person providing a similar style of narrative response.

Colleagues will be given assurances that all data are to be held confidentially and that they need give no reason if they do not wish to be involved. Each colleague participant will receive a full participant information sheet and consent form if they do wish to participate (attached).

Thank you for considering this request for permission to conduct the research, and please let me know if you require further information.

Yours sincerely

[Signature]

[Name]

Chris Nield
Educational Psychologist &
Postgraduate student
School of Psychology
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Tower Building
Park Place
Cardiff CF10 3AT

029-208-74007

NieldFM@cardiff.ac.uk

Chris Nield
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Countyshire EPS
Road Name Primary School
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chrisnield@countyshire.gov.uk

D - INITIAL EMAIL REQUEST TO COLLEAGUE EPS

Dear Colleague

DEdPsy data collection – request for participation

I have now planned the thesis aspect of my DEdPsy work with Cardiff University, and the University's Ethics Committee considers that the proposed research meets the ethical standards of the British Psychological Society. The research proposal has therefore been passed, and the Committee has given permission for me to approach you in order to invite your collaboration with the research.

You are being invited to take part in a research study which looks at the role of the Educational Psychologist in assessing Language in children and young people. It is designed to explore your general views and confidence with using certain tools.

Some very brief details on what this would involve are:

a) participating in an individual semi-structured interview of about 30 – 45 minutes with the researcher, discussing this area of EP practice. As part of this interview there will be an opportunity to capture your views on various elements of your practice using scaling from 1-10. The interview would be audio-recorded with your permission.

b) receiving some informal information from the researcher on the nature of language difficulties in children (30 minutes)

c) receiving some informal training from the researcher on a specific approach to assessment, with materials provided, as part of your regular casework with children in schools (30 minutes)

d) giving a follow-up semi-structured interview with the researcher some weeks afterwards to review your experience. This may take a similar length of time as the first interview, or be slightly shorter. The interview will also be audio-recorded with your permission (30 minutes)

If you are interested in participating I will provide more information on what the research will involve. There will be opportunity to find out in greater detail through discussion with the researcher prior to consenting, during the interview, and through the feedback process following the completion of the data collection

This project has been passed by Cardiff University's Ethics Committee, and all assurances about total confidentiality, anonymity and opportunity to withdraw at any stage are all in place, and these would be formalised with you if you are able to take part.

I completely understand if you would prefer not to become involved with this - no need for reasons!

Otherwise, and hoping that you may be able to assist, I would come to meet you at your base and at a time to suit you.

I will await your response and then (I hope) be able to set a date for us to get started!

Many thanks in advance!! [Name] Educational Psychologist

E - PARTICIPANT EP INFORMATION FORM

You are being invited to take part in a research study which looks at the role of the educational psychologist in the assessment of Language in children and young people. It is designed to explore your general views and confidence in this professional area.

However, before you decide whether to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

If there is anything that is unclear, or if you would like more information, then please ask the researcher, **Chris Nield** chrisnield@countyshire.gov.uk

What is the purpose of the study?

The research forms the thesis requirement for Chris Nield's professional doctorate in Educational Psychology at Cardiff University.
The study is designed to explore the role of the EP and your general views and confidence in the area of assessment of children's language.
The aim is for the study to be completed by the end of the Summer Term 2012.

Why have I been chosen?

You have been chosen as a colleague practitioner Educational Psychologist (EP) whose generic work involves contact with individual children and young people with a wide range of presenting needs, difficulties and strengths.

Do I have to take part?

After you have read this information sheet it is entirely up to you to decide whether or not you take part. If you do consent to take part and later change your mind, you are still free to withdraw your responses up to two weeks after taking part, without giving a reason. If you do wish to withdraw at any time you need only inform the researcher, either directly or by email.

What will be required of me if I do take part?

If you do consent to take part, there are four different parts to the study:

a) You will be asked to complete a semi-structured interview with the researcher, covering your general views on aspects of assessment (about 30 to 45 minutes). To ensure accuracy of data collection and flow of discussion this will be audio-recorded and subsequently transcribed to support the accuracy of the data collection process. If you do consent to take part but would prefer not to be audio-recorded please discuss this with the researcher and an alternative (written notes) format will be used. As part of this interview there will be an opportunity to capture your views on various elements of your practice using scaling from 1-10.

b) You will receive some informal information from the researcher on the nature of language difficulties in children (about 30 minutes)

c) You will receive some informal training from the researcher on the use of a specific approach to assessment, with materials provided (about 30 minutes). This task can be used as part of your regular casework with children in schools and involves the use of a book with no text, only illustrations, to share with the child. Specific record forms will be provided for you to

record details of your session sharing the book with the child, for you to use as appropriate to your practice. You will not be expected to use the task in a standard manner, but rather to use it as flexibly as befits each individual context; further details will be provided when we meet

d) You will be able to apply the technique, as relevant, through your generic casework with children and young people who have been referred to you through your schools' own process of prioritisation. The technique need only be used as an additional approach in an assessment situation and there need be no individual selection of children or young people for the task (potentially minimal time cost as this would be part of your generic work)

e) You will be asked to complete a follow-up semi-structured interview with the researcher, discussing the technique and its application with children and young people (about 30 minutes)

f) Once you are familiar with the activity to be carried out with an individual child you may feel that this raises a number of issues for the way you would work with a child. For example, you may consider that the research activity will substantially extend your time with the child or that it would replace an activity you would have preferred to undertake with the child. If you are concerned that the research activity prevents you from undertaking your own preferred activities, then your own practice must take precedence, and the research activity should not be used. In the event that you consider the research activity substantially alters the session with an individual child in any way, you should either suspend the activity or obtain the verbal consent of the child and provide the child's parent with the option of opting out of this activity if that is their wish.

Are there any possible risks or disadvantages in taking part?

There are no risks or disadvantages in taking part in this research. All information you give will remain confidential and will not be disclosed to anyone other than the researcher and the University supervisor. If you do happen to find that any part of the research is causing you concern you should contact the researcher either directly or via e-mail to discuss your concerns.

What are the potential benefits of taking part?

By taking part you will contribute to professional practice in this area.

What if something goes wrong? Making a complaint

There is no reason that anything should go wrong with the study, but if you have a concern about any aspect of this study, you should contact the researcher directly to discuss your concerns. Alternatively you may wish to contact the researcher's supervisor or Cardiff University:

Supervisor:
Dr Simon Griffey, Research Director DEdPsy, School of Psychology, Cardiff University,
Tower Building, Park Place, Cardiff CF10 3AT telephone 029 208 74007 (School of Psychology)
email: griffeysj@Cardiff.ac.uk telephone 029 208 70366

Cardiff University Ethics Committee: email psychethics@cardiff.ac.uk

Confidentiality and ethical considerations

All information received from you during the course of this study will be treated as confidential. Each audio recording and semi-structured interview form will be held securely and confidentially until four weeks after the second interview has been completed [sufficiently long to ensure the data have been entered correctly and have been subjected to the relevant analysis], at which time they

will be anonymised. When the data are in electronic form they will be stored anonymously and in line with the guidelines of the Data Protection Act on a password-protected computer, and in a secure (lockable) location.

The study does not require any specific identification or selection of experimental 'subjects' other than the children who are referred to a school's EP through the appropriate route with parental consent obtained as part of that process, and with whom an EP would work on a daily basis. The study does not use any deception or require the application of any approaches or techniques which would not be wholly congruent with the generic EP role, best practice and associated professional guidelines

What will happen to the results of the research study?

The results will form part of the thesis for a professional doctorate in Educational Psychology. The findings will be shared with the Countywide Educational Psychology Service and it is hoped that these will be suitable for publishing. No participants will be identifiable in written or published material.

Who has reviewed the study?

The study has been reviewed and passed by Cardiff University's Ethics Committee
Thank you for considering taking part in this study.

Chris Nield
Educational Psychologist
Countyshire Educational Psychology Service & Cardiff University

Contact details chrisnield@countyshire.gov.uk 01234-567890 or
NieldFM@cardiff.ac.uk

F - PARTICIPANT EP CONSENT FORM – CONFIDENTIAL DATA

This research study looks at the role of the Educational Psychologist in the assessment of Language in children and young people and is designed to explore your general views and confidence in this area of professional practice.

I understand that my participation in this project will involve

- An individual semi-structured interview with the researcher of 30-45 minutes, discussing this area of EP practice. As part of this interview there will be an opportunity to capture your views on various elements of your practice using scaling from 1-10. The interview will be audio-recorded with your permission.
- Being the recipient of information on the range of language difficulties in children (30 minutes) and training in the use of a specific set of materials to use for assessment of language (30 minutes)
- The application of the technique as detailed in the Participant Information Form as part of your regular casework with children in schools
- A follow-up semi-structured interview following the completion of the data gathering period to review your experience. This may take a similar length of time as the first interview, or be slightly shorter. The interview will also be audio-recorded with your permission

I understand that participation in this study is entirely voluntary and that I can withdraw from the study at any time without giving a reason.

I understand that I am free to ask any questions at any time. I am free to withdraw or discuss my concerns with the supervisor of the study, Dr Simon Griffey, School of Psychology, Cardiff University.

I understand that all information provided by me during the course of this study will be treated as confidential. Each audio recording and semi-structured interview form will be held securely and confidentially until four weeks after the second interview has been completed [sufficiently long to ensure the data have been entered correctly and have been subjected to the relevant analysis], at which time they will be anonymised. When the data are in electronic form they will be stored anonymously and in line with the guidelines of the Data Protection Act on a password-protected computer, and in a secure (lockable) location.

I also understand that at the end of the study I will be provided with additional information and feedback about the purpose of the study.

I, _____ (NAME) consent to participate in the study conducted by Chris Nield, School of Psychology, Cardiff University

with the supervision of Dr Simon Griffey.

Signed:

Date:

Initial interview schedule with participant EPs

The full version of the questionnaire is presented under Data Collection Methods as it could not be finalised at the time of submitting the thesis proposal - Appendix - K.

Follow-up interview schedule with participant EPs

The full version of the questionnaire is presented under Data Collection Methods as it could not be finalised at the time of submitting the thesis proposal - Appendix - L.

G - DEBRIEF SHEET FOR PARTICIPANT EPS

Thank you for taking part in this study, entitled "Just tell me when you don't understand – an exploration of the role of the educational psychologist in the assessment of children's language".

The study aimed to explore a number of aspects of the role of educational psychologists (EPs) in their generic work where initial formulation and/or assessment of a child or young person's learning profile is necessary

The study was based upon a number of underlying premises:

- That language difficulties may be a component for children who are referred to the educational psychologist for other presenting concerns (e.g. behaviour, rate of learning, social difficulties, attention and concentration)
- That overt language difficulties will probably have been recognised and addressed in the Early Years through the range of developmental checks or by professionals working with the child in school; however, as language difficulties are dimensional and not categorical, children may have less evident language difficulties which nevertheless could impact upon their progress or be a feature within a more evident presenting concern
- That EPs may not feel confident in the area of assessing children's language, for a range of possible reasons which may include: sensitivity to the boundaries of different professional groups, especially Speech and Language Therapy; concomitant absence of experience in this area; a lower awareness of the presentation of and impact of less evident language difficulties
- That EPs would be able to develop confidence in their practice in response to a relatively simple two-part intervention:
- a) the provision of a training session in the area of language difficulties and
- b) the application of a specific assessment task for the EPs to use in their initial exploration of a child's language

The research questions to address these aims were:

- How confident do EPs feel in their knowledge about children's language?
- How confident do EPs feel in assessing children's language?

- In what ways was the training sessions and the Frog Story useful for assessing children's language?
- Has using the Frog Story changed the way you have subsequently assessed language?

As you will have realised from our initial and follow-up interviews, the study was investigating whether EP confidence in their practice in this area could be enhanced with a relatively straightforward assessment activity.

All the information you provided will be held confidentially, and you do have the right to withdraw your data both without explanation and retrospectively.

There is a list of relevant readings if you wish to find out more about this subject and, once the study has been written up, the entire project will be shared with the Educational Psychology Service.

Contact details for comments or queries:

Supervisor: Dr Simon Griffey, Research Director DEdPsy, School of Psychology, Cardiff University, Tower Building, Park Place, Cardiff CF10 3AT telephone 029 208 74007 (School of Psychology) email: griffeysj@Cardiff.ac.uk telephone 029 208 70366

Cardiff University Ethics Committee: email psychethics@cardiff.ac.uk

Researcher:chrisnield@countyshire.gov.uk 01234-567890 or NieldFM@cardiff.ac.uk

Thank you once again for your participation in this study.

H - LETTER REQUESTING CONSENT FOR EP WORK IN SCHOOL

NB (Requested by Ethics Committee subsequently not required)

[Full name to be included]
Headteacher
School Name
School Address
Town + Postcode

Countyshire EPS
Address
Address
Town + Postcode

Date

Dear [Insert name of Headteacher as appropriate]

DEdPsy Thesis: Information for and consent from Head of School to conduct a research study

A colleague Educational Psychologist (EP) within the Countyshire Educational Psychology Service [Chris Nield] is a postgraduate DEdPsy student in the School of Psychology, Cardiff University. Cardiff University's Ethics Committee considers that the proposed research meets the ethical standards of the British Psychological Society; the research proposal has therefore been passed, and the Committee has given permission for me to approach you in order to obtain your consent to support her research.

The research proposal is entitled **Just Tell Me When You Don't Understand - the role of the Educational Psychologist in the assessment of Language**

In order to research this Chris Nield has recruited a number of EPs from the Countyshire EPS to administer a simple task to the children who would ordinarily be referred to the school's EP as part of their casework i.e. there is no selection of children to the project, and no manipulation of conditions or deception involved.

The Cardiff University Ethics Committee states that:

[Where a study] such as this is minimally invasive and only involves routine tasks it would be sufficient to ask for a confirmation letter from the Head of School that s/he is happy with the study.

The Ethics Committee goes on to explain that the British Psychological Society's Code of Human Research Ethics states that:

In relation to the gaining of consent from children and young people in school or other institutional settings, where the research procedures are judged by a senior member of staff or other appropriate professional within the institution to fall within the range of usual curriculum or other institutional activities, and where a risk assessment has identified no significant risks, consent from the participants and the granting of approval and access from a senior member of school staff legally responsible for such approval can be considered sufficient.(p.17)

For the activity, each EP has been provided with one of a parallel series of children's story books without text (The Frog Story series), in order for them to share the book with a child and to ask the child to tell the story in their own words. Record forms have been created where EPs may note the child's responses. It is not intended to be applied in a prescriptive manner, but rather to be used in the

flexible manner in which EPs frequently do work, giving prompts, support and guidance as appropriate to ensure that the child can feel successful with the task. In this manner the EP can then draw a conclusion about the child's capability with this narration task, and the implications in terms of either strengths or difficulties for the child and their learning within the classroom. For older students they can either be asked to tell the story 'as if you were telling it to a much younger child', or an alternative stimulus will be used from the 'Where's Wally?' series, with the intention of the young person providing a similar style of narrative response.

All data will be held as part of the individual child's EPS file, with the confidentiality which this provides, and shared only with the researcher.

Thank you for considering this request for permission to conduct the research, and please let me know if you require further information.

If you are in agreement with the use of this task could you please sign below:

"I agree to the routine task being used by the visiting EP with a child or young person whom the school has referred to the EP, as part of their individual casework in the school."

_____ _____

Signed Please print Name

_____ _____

Role in school Date

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Educational Psychologist & Postgraduate student
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I - TRAINING SESSION FOR PARTICIPANT EPS

Summary of language structure and potential difficulties

Language framework (based on the Bloom and Lahey model)

Expressive language

Form: Sounds, words and sentences that make up a language i.e.

- syntax (grammar)
- morphology (shape of the words) &
- phonology (the sounds represented by the arbitrary symbols which are the letters)

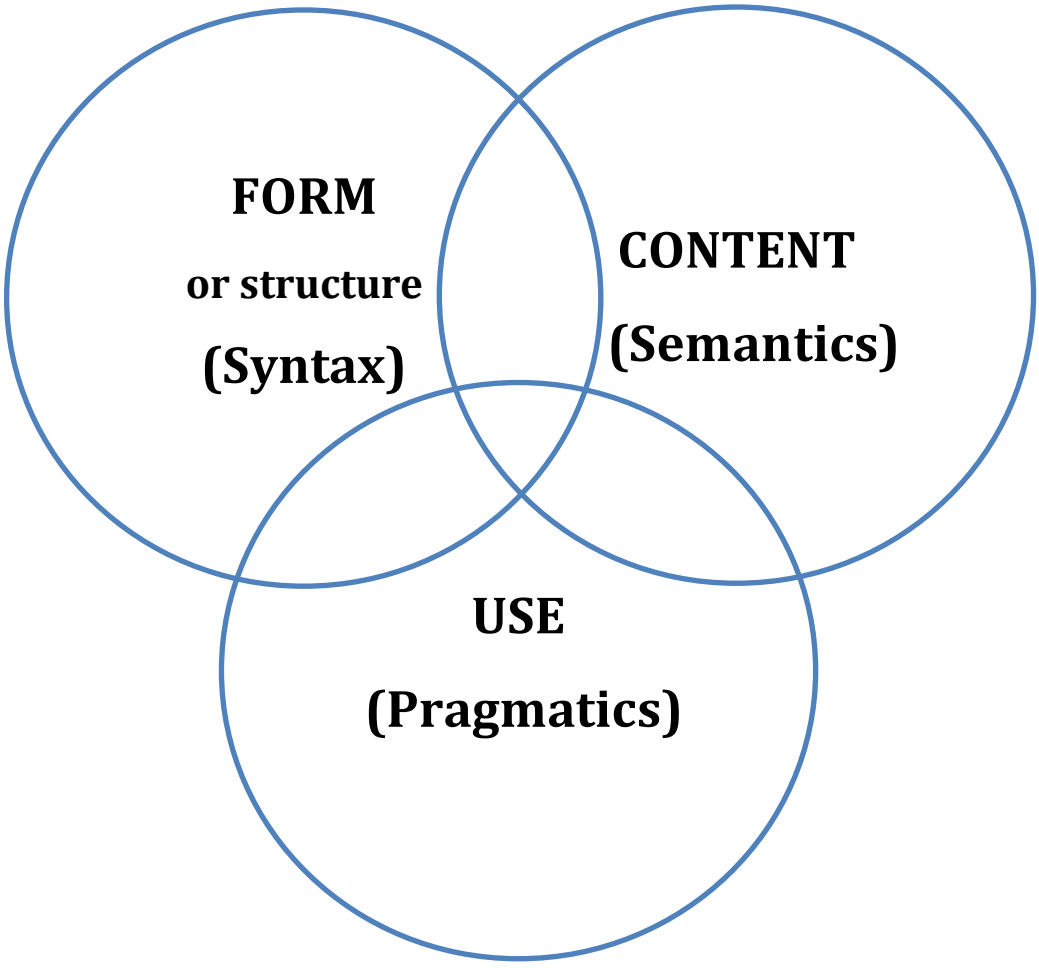
Content: Knowledge we have of words and concepts (semantics)

Use: The way we use words and sentences to communicate, learn, interact with others:

- pragmatics (understanding the subtleties of language – e.g. not being literal)
- social discourse (appropriate use of language according to the social context)

Following the structure provided by Bloom and Lahey, the information for participants will broadly cover the follow Bloom and Lahey's areas of language development:

Figure 1 Bloom and Lahey's model of language (1978)



The difference between ***delay*** and ***disorder – and any potential implications***

Identifying potential difficulties in all these areas will be dependent upon the EP's knowledge of typical language development ***Any potential difficulties observed may form the basis for generating hypotheses to test out: with the child, with teaching staff who work with the child on a daily basis, and with family***	
Area of expressive language	**Possible difficulties and examples**
Grammar	• Immaturities of grammar e.g. *He go-ed to the shops* • Irregularities of grammar i.e. errors which sound/are incorrect and are not typically developmental e.g. • *There it's something white but I can't find* • *Don't let out* • *Very very more time more traffic much*
Pronouns	• Confusion of personal pronouns: e.g. she/he and others
Vocabulary	• Does the child have an age-appropriate vocabulary – consider the factors upon which this would depend e.g. opportunity & experience, health, early education • Is the child re-casting i.e. making several 'false' starts to an utterance – possibly to create some time to formulate the sentence
Word-finding	• Word-finding / word-retrieval difficulties can be masked by a superficial competence e.g. oh, you know the thing; oh I know the word but I just can't think of it; thingy, I really don't know etc. • Hesitations (a) – needing processing time to drawn down words / formulate a sentence • Hesitations (b) – the child attempting to look as though they are thinking about it when they have not really understood
Semantically-linked errors Relates to → (following)	• A pattern of a child using an incorrect word for an item, yet nevertheless from the same semantic category e.g. using fork instead of knife; The EP needs to make a judgement of whether this is a one-off error or whether it is a pattern. Ask the child if it is an issue
Linguistic categorisation	• Language less structure and organised than might be expected e.g. not knowing (or not applying) vehicles, transport, jungle animals, furniture, clothing • This could be explored with regard to other areas of organisational skills
Semantics	• Understanding language at a literal level e.g.

	• *Dogs must be carried* • *Write your answers on the table below* • *Pull your socks up* • This can link to difficulties with appreciating humour based on language – may prefer slapstick comedy • Insufficient reference information e.g. it's going there where the listener does not know what is being referred to

Additional components of language	**Possible difficulties and examples**
Listening and attention	• The level of the child's capacity to listen and attend or produce language • Attention 'span' is not a unitary function as it relates to: interest level; presence-absence of visual material to support; poor attention control
Phonology	• Specific difficulties with the phonology of a language relate to the auditory perception of the sound, the meaning that can be derived from hearing the sound, and the cognitive component of language processing. • Discrimination between sounds can be an issue which then impacts upon reading and writing. Even when literacy difficulties have been addressed, there can be a residual impact upon spelling, where "bizarre" combinations of letters may be seen in a child's attempt to capture the ultimately arbitrary nature of the letters and sounds which convey the spoken word.
Other underlying neuropsychological processes in language production	• Memory • Visual processing • Auditory processing • Coordination of movement (verbal dyspraxia) • Phonological difficulties
Inferencing	• Applying what is already known in the story to what my happen next
Echolalia	• Saying the same thing at the end of each page - possibly an echo of a familiar accompanying adult e.g. Let's turn over now shall we?
Emotion	• Recognising the emotional aspects of the characters' experiences • Being able to perspective-take to appreciate the experience of the characters e.g. being bullied, left out • Attributing the appropriate emotion to the elements of the story at that time

Narrative	• Recognising that there is a progression throughout the story with a main, and subsidiary characters
Speech production	• An incidental factor in this study, but EPs may notice immaturities of sound production or possible difficulties in the motor planning element of speech (verbal dyspraxia)
Pragmatics	• This may be less evident in a an activity which requires re-telling of a story, although pragmatics in the interaction between EP and child will be noted • The capacity to use language in a fluent and flexible manner taking account of the context within which it is produced • Using language not appropriate to the context e.g. being overly-familiar with the EP; being pedantic • Does the child comment spontaneously upon events in the book e.g. Oh – he's feeling really sad; Look, he's going to hurt himself • Does the child enjoy / understand the humour in the story

Receptive language

NB There is no additional information on Receptive Language, although EPs may well note occasions when the child appears not to understand and occasions when re-phrasing, simplifying, adding sign or gesture, etc. are necessary

Narrative assessment and analysis

Narrative assessment is sensitive to a range of communication difficulties, and narratives can be analysed according to their global structure, local linguistic structure, and the child's ability to provide evaluative comments, especially about mental or emotional states. Inferencing is an important aspect, along with the ability to suppress attention to unnecessary detail, and to provide a coherent account at the correct level of detail.

There is a rapidly accumulating body of research suggesting that narrative assessment is a valid, sensitive and potentially less-biased language assessment tool relative to norm-references standardised language assessments.

One element of narrative skill is **inferencing**. Inferencing occurs on two levels: in ***text-connecting*** a child may need to integrate information explicitly mentioned in the text to link ideas in two sentences: e.g. *Michael got the drink out of his bag. The orange juice was very refreshing*. The inference being that Michael got orange juice out of his bag.

The second type of inference is ***gap-filling*** where a child needs to integrate their own general knowledge with information in the text to fill in details which are not explicit in the text: e.g. inferring that a child is at seaside when presented with a sentence such as *The girl put on her swimming costume but the water was too cold so she built sandcastle instead.*

There are numerous methods of coding narrative discourse, depending upon the level of language under examination and the purpose behind the coding. Practicalities and time constraints also feature in the choice of method.

Analysis of narrative skills can be used in an ipsative and criterion-referenced manner to set targets for a child who is demonstrating difficulties in this area, without regard for performance against the norm-reference group

If you wish to carry out some very basic narrative analysis, on the basis of writing the child's exact words, the following attributes of the responses can be used:

Productivity is made up of **TNW** + **NDW** + **LENGTH**:

TNW = Total number of words

NDW = Total number of different words

LENGTH = total number of T-Units. This is a measure of story output, and improves with language maturity / language ability and chronological age

T-Units are individual phrases such as

and the kid had the dog (6 years)

and when they got there they set down the stuff (8 years)

and she thought it was just some people dressed in a costume (11 years)

See also list of examples

Complexity is made up of Total number of T-units containing 2 or more clauses - this may be used if wished

The Frog Story assessment

- Summary advice sheet for the Frog Story assessment

- The main purpose of this activity is not for the researcher to gather information about the child's narrative skills and abilities *per se*; the researcher has devised it for the individual EP to gather sufficient information about the child who has been referred to contribute to an understanding of their specific profile and learning needs. The activity is to be used in as flexible a manner as you wish to use it

- The 'instructions' to the child are quite important, but they need not be given in a standardised manner. Please just try to include the main suggestions at the top of the answer sheet and modify them according to the way you might when introducing any activity to a child

- Ideally the child would complete the activity without prompts, but if you judge that a prompt would help move things along, please just do that. If you could mark how many times (and where) you need to do this, just with your own Prompt notation, then that will help to give a sense of the child's fluency. Marking hesitations, *ums* and *ers*, will also illuminate possible word-finding difficulties e.g. ('*hes* ...' is about 2-3 secs; '*hes* ... *hes* ... ' is about 5-6 secs – personal guidelines only).

- As above – if you think that a question would elicit more information then ask it because this process can also be used to explore how much scaffolding a child requires to achieve a task: its purpose is not to produce a simple pass-fail but to be used dynamically if that suits your practice

- If there is another way you would work naturally with the child, feel free to do it, based on the materials – but please note what you did do (e.g. modelling, gesture and illustration etc.)

- Linguistic 'recasting' is useful to note – these are 'false starts' where the child gets part way through a sentence and then goes back to reformulate it

- The column with *Main Elements* is to capture the expected comments for a particular illustration – use it as you would like. You could circle elements which the child includes or strikethrough any which are obviously absent etc. It is there to make your assessor role easier

- It would probably be helpful to you if you could write in verbatim what the child says. However, this is not always appropriate and it is not absolutely vital. If you do not do this, then some sort of note to yourself of your view of the child's performance – at the time – on those pages, would be necessary

- The summary boxes at the end are for your professional judgement, based on what you know about children and working with them. The prompts for strengths and difficulties are there as a reminder of the type of features (both negative and positive) which are evident in children's language development. For 'difficulties' - sometimes it is not easy to readily recognise word-finding difficulties, or 'talking all around the topic without getting to the heart of it', until we actually write what a child is saying

- The following section gives information about Narrative skills and a method for conducting a basis analysis of the language produced. This is for your use as you choose

Re-telling the story

If you wish to explore the child's memory, then an additional way of using the text is for the child to tell the story as above at the start of the session, and with no prior warning that you will ask for this to be repeated at the end of your session (if you can leave 30-40 minutes that fits with the guidance in the literature). At that time say something like:

- *Remember the story you told? Do you think you can you tell it again?*

Make your own professional judgement as to whether this highlights any issues for the child's learning profile

Frog Story series - titles and publisher

Mercer Mayer, New York: Dial Books for Young Readers (1969 onwards)

- Frog Goes to Dinner
- One Frog Too Many
- A Boy, a Dog and a Frog
- A Boy, a Dog and a Frog and a Friend
- Frog on his Own

J - DATA COLLECTION METHODS - QUESTIONNAIRE

Initial survey of the whole EPS' views on assessment of language (Data A)

This questionnaire is about general assessment practice when you work individually with a child who has been referred to you. The questions focus upon children's language in a more general way, rather than upon children who have clearly evident language difficulties and who have already been referred to Speech and Language Therapy.

~~ All replies to be submitted anonymously ~~

Please do not spend too long thinking about this – just your first reaction to each item. Of necessity it will be a generalisation and I am aware that there will be occasions when you would want to say *Yes…but* .... and *It depends*... However. This survey is intended to capture a snapshot-cum-overview of practitioners' viewpoints across a whole Service.

It requires either a circled response or a tick in a box to indicate your response to a range of items: e.g.

Definitely	Probably	Possibly	Possibly not	Probably not	Definitely not

Or on a scale:

Extremely Confident 6 →					Not at all confident 1
6	5	4	3	2	1

There is the opportunity in some items to provide further information, if you wish to do so, but there is no requirement, and circled / ticked responses will certainly provide sufficient information if you would prefer.

These questions relate to your practice in **mainstream schools** and your work with the children who are referred to you.

Each question here is prefaced by "In your professional opinion … …"

Q.1	**Please mark ✓ for each question …**					
Is language a <u>major</u> factor for an EP to explore for children with difficulties in the area of …	**Definitely**	**Probably**	**Possibly**	**Possibly not**	**Probably not**	**Definitely not**
Literacy?						
Numeracy?						
General rate of learning/progress?						
Attention and/or concentration?						
Social/emotional aspects of learning & school?						
Behaviour?						
Sensory issues – V.I., H.I.?						
Autism Spectrum Conditions?						
Physical disability e.g. cerebral palsy?						
Medical issues: short- or long-term illness?						
Issues of general well-being including e.g. bereavement/ family disruption / neglect/ abuse?						
Other: please specify if you wish						

Q.2	**Please circle…**					
Do you think language difficulties could be masked by superficial competence to the extent that a teacher and/or parent would not recognise them, or at least recognise that there were some issues?	**Definitely**	**Probably**	**Possibly**	**Possibly not**	**Probably not**	**Definitely not**

Q.3.	**Please circle where your confidence lies on this scale…**					
*How confident do you feel that you know and can recognise the range of **typical** language development for a child?*	**Extremely Confident 6** →					**Not at all confident 1**
	6	**5**	**4**	**3**	**2**	**1**
Depending upon your scoring you can decide whether to go to Q4 or to Q5						

Q.4	**Please mark ✓ for each question …**		
*If you felt you did have any level of confidence about recognising **typical** language development in Q.3. then did this knowledge/ confidence come from … (tick as many as relevant); if not go to* **Q5.**	**Yes mainly**	**Yes partly**	**No not at all**
Your training course?			
Your professional experience prior to training as an EP?			
Your professional experience since/while working as an EP?			
Your personal experience? e.g. young family members			

Q.5.	**Please circle where your confidence lies on this scale...**					
*Even if you felt you had no confidence in the area of **typical** language development in Q.3., how confident do you feel to recognise these aspects of language …*	**Extremely Confident 6** →					**Not at all confident 1**
…when a child has difficulties with **receptive** language?	**6**	**5**	**4**	**3**	**2**	**1**
…when a child has language which is **delayed**?	**6**	**5**	**4**	**3**	**2**	**1**
…when a child has language which is **disordered**?	**6**	**5**	**4**	**3**	**2**	**1**
…what **component(s)** of the language might be breaking down?	**6**	**5**	**4**	**3**	**2**	**1**

Q.5. contd.	**Please circle where your confidence lies on this scale…**					
*Even if you felt you had no confidence in the area of **typical** language development in Q.3., how confident do you feel to recognise these aspects of language …*	**Extremely Confident 6** →					**Not at all confident 1**
…and what is your level of confidence in knowing …						
…how to advise the school/family?	**6**	**5**	**4**	**3**	**2**	**1**
…when to refer to Speech and Language Therapy?	**6**	**5**	**4**	**3**	**2**	**1**
…what materials are 'out there' for schools?	**6**	**5**	**4**	**3**	**2**	**1**
Could you give some examples of materials you might suggest… if you wish						

Q.6	**Please mark ✓ for each question …**					
*Whether **Yes** or **No** in Q3 in terms of typical language development, and you meet a child whom you thought might have language difficulties but you really were not sure, would you … (as many as relevant)*	**Definitely**	**Probably**	**Possibly**	**Possibly not**	**Probably not**	**Definitely not**
Apply 'watchful waiting' while you see how things develop over a term or so						
Ask the teacher/parent/child their viewpoint and take things from there?						
Ask an EP colleague?						
Discuss with Speech & Language colleagues if you knew they were available to do this?						
Other? Please specify						

Q.7	**Please mark ✓ for each question …**					
*Whatever your level of confidence, if you **did** decide to explore a child's language which of the following would you use? Not use?* *Please do not omit any (e.g. trainees not yet using certain items mark 'No')*	**Definitely**	**Probably**	**Possibly**	**Possibly not**	**Probably not**	**Definitely not**
Informal looking at a library book together?						
Informal looking at the child's reading book together?						
Informal looking at a book(s) that you use on a regular basis?						
Title(s) please…						
Standardised assessments Other reading/ language tests Please name if you wish						
Standardised assessments - WIAT						
Standardised assessments - WISC						
Standardised assessments - BAS						
Standardised assessments - CELF						
Standardised assessments - Other Please name if you wish						
Other assessments/ checklists etc. Please name						

Q.8	**Please circle …**	
Do you think you need CPD in the area of language assessment – Now? (Academic year 2011-12)	**Yes**	**No**
OR>>>>>>		
Do you think you need CPD in the area of language assessment – Later? (Academic year 2012 on)	**Yes**	**No**

… and finally … How many years' experience do you have as an EP?

Please circle….

In training	1-5 years	6-10 years	11-15 years	16-20 years	21-25 years	25+ years

THANK YOU!!!!

K - DATA COLLECTION METHODS - INITIAL INTERVIEW FOR PARTICIPANT EPS

Initial interview schedule for participant EPs (Data B: pre-)

Background information about the EP:

Years practising as an EP? Different EP Services?

Specific additional experience: Professional? Personal?

1. **Before asking you any questions relating to the topic, I would like you to think about your own assessment practice in the area of Language**

Note to self – this following may be unnecessary and what is really needed is the overview and to capture something about general personal judgement on competence and confidence (e.g. confidence, competence, your general satisfaction with your practice etc.).

As an overall judgement, in general terms where would you put yourself and your confidence in your practice in this area now? Scale is from 1 to 10 where 1 is low?

Low											High
	1	2	3	4	5	6	7	8	9	10	

Any comments about this ...?

2. **How would you define Language?**

3. **What areas do you consider when looking at a child's Language? Can you rank them in terms of importance to the child's progress?**

4. **How do you see Language when looking at a wider picture of a child who has been referred to you?**
   (To draw out how important the EP feels language is to assess)

Sub questions arising from main Q [prompt for examples]

- What depth do you go into? Reasons for choosing / using? How do you feel about ...?
- Quality ...? Problems & barriers ...? Strengths ...? Why ...? etc. ...

5. **What assessment approach or approaches are you most likely to you use and how confident do you feel about their use and the information they provide?**

6. **What would you describe as a Quality Assessment of Language?**

7. **Of our colleague professional groups, who do you most readily think of as having a role in identifying language difficulties?**

8. **Thinking back to your 'rating' of your own assessment practice (Language) at the start of this interview, if you had to come up with three things that you wanted to change about your practice ...?**

- Can you rank them ...? How would you achieve the changes ...?

L - DATA COLLECTION METHODS - FOLLOW-UP INTERVIEW FOR PARTICIPANT EPS

Follow-up interview schedule for participant EPs (Data B: post-)

The questions asked at the follow-up interview are partially dependent upon analysis of the responses to the initial semi-structured interview, and therefore may be reviewed and refined. It is anticipated that the following schedule would form a sound basis, with some opportunity for modification:

[Note to self – it will be important to have transcript and reminder in case there is a need for prompts]

Open the interview with thanks for the time taken and commitment shown by the colleague in participating in the study.

1. **Thinking back to the areas you look at in a child's language, and their relative importance, are there any other comments you would like to make?**

   Number of times task used? Other questions relating to use e.g. When you used the book / picture the key features you noted were…? *[NB to self – reassure that these could be both positive and negative]*

2. **Thinking about the training session at the outset - language development and language difficulties.**

   Did you find this useful?
   Definitely … Probably … Possibly …Possibly not …Probably not …. Definitely not

   Has it changed your practice?
   Definitely … Probably … Possibly …Possibly not …Probably not …. Definitely not

3. **Consider the usefulness of the Frog Story and the narrative approach – discuss likelihood of using this assessment tool in subsequent sessions with a child -**

   Did you find this useful?
   Definitely … Probably … Possibly …Possibly not …Probably not …. Definitely not

   Will you use it again?
   Definitely … Probably … Possibly …Possibly not …Probably not …. Definitely not

   Has it changed your practice?
   Definitely … Probably … Possibly …Possibly not …Probably not …. Definitely not

4. **What do you think / feel about your confidence in your own assessment practice in the area of Language now that you have used the task? Ask Why?**

Low	1	2	3	4	5	6	7	8	9	10	High
Pre-											
Post-											

Any comments about this ...? **Remind of three things to change practice – revisit these and explore whether there are any changes to the previous comments** *[reminder available]*
~ Further thanks and details of debrief process ~

M - DATA COLLECTION METHODS - FINAL GROUP DISCUSSION

The group discussion at the end of the study followed the individual follow-up interviews and de-brief with the participants. The discussion was structured to capture the participants' experiences of and comments upon various elements of the study. The tone of the group was set through reassurances about openness and confidentiality within the group and, as an established group of colleagues they appeared to have no concerns about sharing both positive and negative experiences and providing constructive comments for any suture developments to arise from the study.

There were broad headings for informal structuring the discussion:

- Advantages/benefits of the assessment approach
- Disadvantages/barriers of the assessment approach
- Usefulness of the training session
- Professional development & impact of the study upon professional practice
- Any issues which arose, e.g. access to suitable children, understanding the task
- The experience from the child's point of view
- Working with others - colleagues and parents
- Unanticipated outcomes

N - RAW DATA - SEE ADDITIONAL ELECTRONIC FILE

O - DATA ANALYSIS - SAMPLE SECTIONS OF TRANSCRIPT WITH CODED EXTRACTS

Some examples of this stage of the process are included here with additional context as advised by Braun & Clarke (2006)

Extract from interview	Coded as
"in [XX service] …it is dreadful to mention psychometric testing …. It's just that it's all done in whispers and, you know, a secret vice…"	**Language:** *Language assessment*
"I think we split language off to the Speech & Language team [the specialist teaching team] or to speech and language therapists. It's about roles and functions in systems and the early impact on children."	**Professional EP role:** *Role boundaries*
"There is pressure from other professionals e.g. SLT to give a cognitive score and then this leads into discrepancy testing…"	**Professional EP role:** *Role boundaries*
"I think that having the structure of the Frog Story task, well it felt like a more legitimate, a more credible basis to talk through some ideas with the teacher….[…] I felt like I had made a huge shift in how the school understood him. It just felt like a good morning's work. And I am pretty sure they were really pleased too."	**Professional EP role:** *Credibility*
"Language is such a huge area it is fundamental aspect of development - without language a child cannot understand and cannot learn."	**Post-study reflections on professional practice:** *Subject knowledge*
"Well I do use assessments but I don't go straight for those … more of a hypothesis-testing …"	**Language:** *Language assessment*
"It definitely made me feel more confident. I just felt like I knew what I was doing, that it began to have a predictability about it, so that I was already building up a bank, almost, of things I might expect to see in the child…"	**Post-study reflections on professional practice:** *Confidence*
"It made me feel clearer about trying to make sense of a little boy who was really puzzling. And it made sense to the teacher too, and they also felt that their views … and their … judgement had been respected, almost. It definitely made me feel more confident. I just felt like I knew what I was doing." [EP: 11+years].	**Professional EP role:** *Collaboration*
"[more confident] […] through having the discussion with colleagues and sharing the observations in the group around the activity and participating with other EPs. Professional reflection needs to be prompted by something external like this."	**Post-study reflections on professional practice:** *The process of CPD*

P - DATA ANALYSIS - PROGRESSIVE REFINEMENT OF THEMES AND SUB-THEMES

Q - SAMPLE FROG STORY RECORD FORM

Each of the double pages in the book(s) was scanned in, reduced, and pasted into a WORD document to create a record form to ensure that the EPs could focus upon building the relationship with the child and considering the pattern of the child's response to the task. The four A4 size sheets of the record form were double-sided printed on a sheet of A3 paper to create a single foldover record form sheet. The sample sheet following is from Frog Goes to Dinner and similar record forms were created for all the books used.

At the outset of the study the design was such that the data were derived from the interviews and questionnaires as the focus was upon EPs' views, while the Frog Story record form was created to facilitate the delivery of the research task. Permission for use of the scanned pages was sought from the publisher for use in this context.

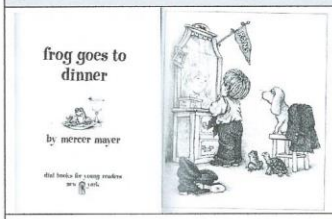
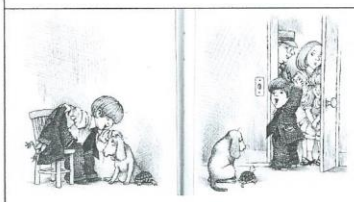
Review of the children's responses to the task in this study leads to the suggestion that responses to the task might form a body of data in any subsequent research exploring this task, with the relevant permission being sought.

In order to remain within copyright restrictions, the samples of children's responses have been presented without the accompanying illustrations.

Frog Goes to Dinner – DEdPsy research study

Reader's name		School	
Year Group and/or age		M/F	
EP		Date	
Reason for referral to EP			

- *Tell me the best story you can from the pictures in this book*
- *Make it as interesting and exciting as you can*
- *Remember to tell me everything that you see*
- *Remember to tell the story so that I know what people are thinking and feeling*
- *If you want you can make some guesses about what's going to happen next after each page*
- *There is no right or wrong ...just make it the best you can*

	Reader says ...	Main elements
		Getting ready to go out Dog looks sad Dog's watching him Turtle watching him Frog watching him Hole in his shoe Picture of frog on mirror
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		
		Says goodbye to Dog Dog looks sad Dog not want to be left Turtle hiding in shell Frog jumped up sleeve Family going out Mum, Dad & sister Dog's fed up Turtle's puzzled Boy waves bye to Dog Dog looks sad Dog not want to be left
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		
		Fancy restaurant Night time Dressed up Doorman Frog in boy's pocket
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		

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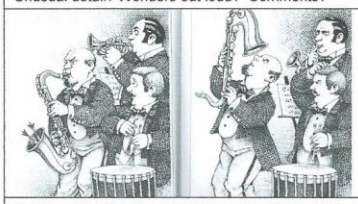
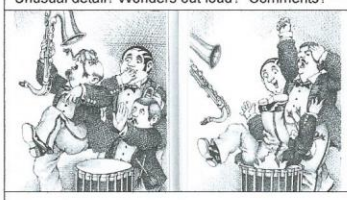
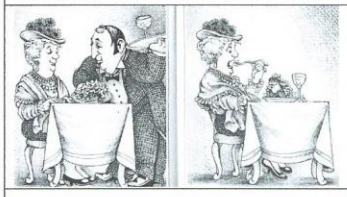
Frog Goes to Dinner – DEdPsy research study

	Reader says ...	Main elements
		Fancy restaurant Choosing from menu Waiter Band playing [Names instruments?] Frog jumps out pocket Frog jumps across
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		
		Man can't blow instrument Looks surprised Looks puzzled Turns upside down Shakes instrument Scratches head
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		
		Frog falls out on man's head Others looking ... horrified? puzzled? Falls back into drum Drum breaks One looks cross Other looks amused
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		
		Band look... cross, amused, puzzled ... Frog jumps to tray Waiter doesn't know Guests (L) whispering Guests (R) maybe cross
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		
		Waiter takes pudding / dessert Woman with fancy hat We can see frog peeping out Waiter can't see frog Woman goes to eat pud Frog pops up Woman surprised / horrified
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		

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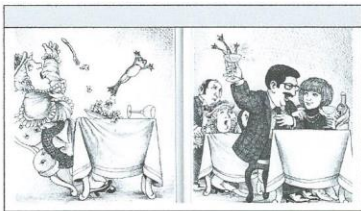
Frog Goes to Dinner – DEdPsy research study

	Reader says ...	Main elements
		Woman falls back – probably screams Frog leaps up Frog looks 'alarmed' Lands in man's drink Toasting a celebration They don't know Other people do know Look alarmed/ horrified
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		
		Woman cross with waiter Telling him off Waiter (L) looks sad Waiter (R) looks ?determined? Frog jumps up out of glass Right up to man's nose Frog ?kisses man? Woman looks astounded
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		
		Mayhem (or similar) Waiter trying to sneak up on frog to catch him Woman with man faints other guests look perplexed (or similar)
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		
		Waiter looks 'disgusted' Takes frog out by legs Frog looks astounded Boy shouting 'Hey!...' Mum shushing boy Dad looking angry Sister looking ?fed up
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		
		Boy protesting about his frog Waiter is saying something like 'Out you ALL go...' Leave by Fire Exit [back door] Family fed up Boy happy to have frog Frog happy
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		

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Frog Goes to Dinner – DEdPsy research study

	Reader says ...	Main elements
		Bad mood in car Mum, Dad and sister angry Boy shamefaced (or similar) Frog perplexed
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		
		Dad saying 'go to your room' Mum saying ... it's not so bad ... (or similar) Sister sticking tongue out Dog and turtle looking puzzled Frog looking puzzled Boy looking ...?
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		
		Boy happy to be back in bedroom Frog happy Dog not so happy Dog looking ...? Turtle not so happy Turtle looking ...?
Mental or emotional state? Humour? Inferencing? Unusual detail? Wonders out loud? Comments?		
	Summary of performance on task	
Strengths in the task? *(e.g. detail, rhythm, confidence, familiar with narrative form, imagination, vocabulary, complexity of language structures, ability to hypothesise)*		
Notable features / difficulties? *(e.g. too concerned with detail, missing important detail, unable to give overview / whole picture of the story, missing the point', not seeing humour, difficulties recognising emotions, reluctance to complete task, restricted vocabulary, word finding difficulties, lack of reference information)*		
Productivity TNW + NDW + LENGTH (if used)		
Story retelling (no prior warning) (if used)		
Conclusions & **Next steps** (if any) Average for age? Above? Below? General view		

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R - SAMPLE CHILDREN'S RESPONSES TO THE FROG STORY TASK

Child A: This example illustrates the task providing positive information for the school: School were querying a general global developmental delay, while the EP felt that the behaviours observed during the Frog Story task, plus the competence of his performance despite all the distractions, led them to discuss an initial plan of managing his distractibility and need for movement	**Child B:** This example illustrates an occasion when the task resulted in a different hypothesis and therefore different plans for support: School were querying ASD, however, the EP judged that the child's response to narrating the story, particularly his high vigilance to the emotions within the story, but other factors too, tended to discount the ASD suggestion, despite the fact that some of the referral behaviours which led school to this view were also seen. Upon discussing this with staff, they provided further background information which led them to consider Attachment as a hypothesis and, as a result, staff felt that this route made 'much better sense' to them, and the little boy that they knew.
Child C & D: These records are from two typically developing language users to provide some comparison.	

Pages	Child A: School querying global delay [Y1 Boy 5:04]	Child B: School querying ASD [Y2 Boy 7:06]	Child C: Typically developing language user [R Boy 5:03]	Child D: Typically developing language user [Y2 Girl 7:02]
1	That one doesn't look very good [the picture] That face is in double with that face Why is it blank? **Q:** No words. No writing	They're having a show. **P** A frog. A tortle and a frog	A little boy has a pet dog. A tortoise and a frog are watching him while he dresses up for his grandparents He has funny shoes	Jack was getting ready for a special occasion. He was wearing some smart clothes. In his room was a Turtle and a Frog. He also had a dog
2-3	He's waving and patting a dog and waving Is that a turtle or what?	He's sad [points to dog] He. The tortoise is in his shell Not in his shell The family's coming back	He went downstairs, the frog's in his jacket and the tortoise is hiding in his shell. He's stroking the dog and saying "Don't worry you won't be scared". Grandparents come and it's time to go. The dog is sad.	The frog looked sad because he was going out to dinner. The turtle hid himself in his shell and the frog crawled up his sleeve. **Q?** so he could go with him
4-5	There's a frog in there and now there's a frog in the boy pocket Is he cross? Is he angry?	**Q?** The Police?	It's night time and they went to a restaurant. The frog went out in the boy's pocket	It was a fancy restaurant because it was called Fancy. All the people were dressed up smartly, wearing medals like Princes
6-7	They're playing in a band Oh he's singing (pointing to	A man who's serving and then the frog is jumping on that page into a trumpet	There's music playing and the waiter tells what food is on the menu. The frog jumps out and into the	While they choose dinner an orchestra played and they were dressed up very smartly indeed.

Pages	Child A: School querying global delay [Y1 Boy 5:04]	Child B: School querying ASD [Y2 Boy 7:06]	Child C: Typically developing language user [R Boy 5:03]	Child D: Typically developing language user [Y2 Girl 7:02]
	waiter)		pipe player	Frog, however, went up the trumpet player man's trombone and he couldn't play it.
8-9	He's looking inside there. The frog jumped in there and goes through and then the frog isn't in there. How can he fit through the tiny space? <u>They look really angry</u>	And then we can see his feet *little reference information?? **H*** but it don't work and makes a funny sound and the man's looking up to see what's in there *short attention span … falling off chair frequently]*	The frog jumps in and the musicians are saying 'Oh no! I can't play any more!' They didn't know why. He looks in the pipe to see what's in there	The other men were really puzzled.
10-11	The frog's on him and he is cross and he is happy	The frog jumps onto the head and the man's angry and they've <u>snapped</u> the drums *Vocab item – presumably does know broke judging by rest of language so **H – word finding**?*	The frog falls on the man's head! The men say 'Stop!' The man falls onto the drum and it breaks	Oh dear! He landed on the trumpet man's head through the trombone. The trumpet man was so horrified he fell onto the drum player's bongo and made the paper [to EP: What's it called the thing that you bang?] come off. The drum man was furious!! Cos he had broken his drum
12-13	He all right and he cross and he laughing and the frog jumping to there	He jumps onto a plate of salad and the man's serving and getting the dinner ready and bringing the dinner to the man It'll be YUK on the next page!! *[good social comment and inference]*	The men are really cross but the trumpet player laughs! The frog jumps onto the tray – the frog's happy	The frog hopped away safely and he plopped onto a plate that the waiter was holding

Pages	Child A: School querying global delay [Y1 Boy 5:04]	Child B: School querying ASD [Y2 Boy 7:06]	Child C: Typically developing language user [R Boy 5:03]	Child D: Typically developing language user [Y2 Girl 7:02]
14-15	The frog is there and then he comes out	She's gonna eat it and the frog will be in her dinner …and she eats it and the lady … "aaah! There's a frog in my dinner"	The waiter takes the food to the lady. The frog jumps out and the lady is scared.	This plate – the dinner – belonged to a lady called Madame Lucienne. She was posh. When she took some scoopfuls off her dinner she saw froggy-woggy! She was horrified!!
16-17	He jumped and everything spilled over and the frog splashed into the drink I think he's a bit mad. **Q:** Cross	He jumps out and then gets into a cup **Q:"**no he's turning round"	The frog jumps out of the food The lady falls off her chair and says 'Aagh!!!' The frog jumps into the water – Splash!! The man doesn't see!	She leapt off her chair; the food scattered all over th place; the knives and forks were flung up into the air, and her wine glass tipped over! A lady called Madame Susan was having some more wine. Her husband, Sir Geoffrey, had his cup and in jumped the frog. They didn't notice though…!
18-19	He got cross. That man there. And he kisses his nose	He drinks and he sees and he goes "Ooh" **P** The <u>mans</u> is cross and they say "that froggy's in my dinner … and my dinner … and I'm really cross"	The lady's really cross with the waiter. The frog kisses the man and the lady thinks 'What a strange thing to do!'	However, the lady that had had the frog shouted at the man and kicked him in the tummy – that was certainly not how posh people should behave..! Meanwhile the man who had the frog jumped in his glass was starting to drink and the frog came up and kissed him on the nose. His wife was shocked!

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20-21	He tried to catch him and then he covered his mouth and the lady is falling over. Is she going to start crying?	**Q… P** Catch it **Q… P** The lady's banged her head on somethink	The waiter tries to catch the frog and everything's broken. The lady looks poorly	Frog jumped onto a different table where the lady has smashed her wine glass… The man's wife was dizzy and couldn't walk
22-23	He going and he pointing at him Mum looks angry	He's open the door with the frog and they're angry. The boy's pointing **Q** Cos that's his frog and he's taking it out	The waiter caught the frog The boy says "No!" and tries to stop him. They think 'Ugh! Yukky boy!'	The waiter took the frog and was about to throw him out of the fire exit. Jack screamed at him… "Don't throw him out of the fire exit!!"
24-25	He pointing at him again and the girl is cross and the daddy cross and the man cross and they going home. [EP asked how he knew they were cross] Because they got cross eyes [EP asked **why** they might be cross] Because they got cross eyes	The daddy was angry and he gets his frog back and he's leave at once. The man who said 'leave'	The boy asks for his frog back "I'll throw you all out immediately!" says the waiter. The boy's happy and the frog's happy	The whole family went up and said "JACK!!" The waitress gave him back his frog. Jack was happy as can be!! The rest of his family were not looking very pleasant at all because their evening had been ruined.
26-27	The frog sad and they cross and he look sad and she look cross	They're sitting being angry with the boy	In the car going home they are all disgusted with the boy. Mum wants the boy to put the	In the car Mum had a very big scowl on her face and dad was driving madly back to the apartment. And his sister? Well. She was just so

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			frog in the pond	angry and fed up with Jack.
28-29	Everyone look cross at the frog	And he's pointing	Dad says "Go to bed!" and Mum says "Go to bed!" and his sister is being nasty	At their apartment Mum and Dad said "Go to your room at once!" and his sister blew a raspberry at him. Yay! He's come back! The dog said that!
30	He, the dog's on his bed and the tortoise looking at him and the frog looking at each other Why is it blank? The story is blank [blank final page] [*further discussion – he meant ..Why is this not coloured in? and Why is there no text?]*	There he is playing and laughing and telling the dog and the tortoise the story. "The End"!	The boy is happy in his room and he's telling the dog the whole story and he's laughing about it. He's not bothered that they're all angry with him The End!	Jack laughed and laughed and laughed about the frog <u>jumped</u> onto the plate and making people dizzy!